

Query Match 100.0%; Score 597; DB 18; Length 132;
 Best Local Similarity 100.0%; Pred. No. 9.7e-55;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 ; EARLIER APPLICATION NUMBER: 60/113,002
 ; EARLIER FILING DATE: 1998-12-18
 ; EARLIER APPLICATION NUMBER: 60/135,426
 ; EARLIER FILING DATE: 1999-05-21
 ; EARLIER APPLICATION NUMBER: 60/144,022
 ; EARLIER FILING DATE: 1999-07-15
 ; NUMBER OF SEQ ID NOS: 39
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 5
 ; LENGTH: 318
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; PCT-US99-22668-5

RESULT 2
 US-09-869-198A-29
 ; Sequence 29, Application US/09869198A
 ; GENERAL INFORMATION:
 ; APPLICANT: Gordon, Robert
 ; SPRANGEL, Jorg
 ; APPLICANT: Yon, Jeffrey
 ; APPLICANT: Dijmans, Jostena
 ; APPLICANT: Gosiewska, Anna
 ; APPLICANT: Dhararaj, Sridevi
 ; APPLICANT: Xu, Jean
 ; TITLE OF INVENTION: Vascular Endothelial Growth Factor-X
 ; FILE REFERENCE: 51935/004
 ; CURRENT APPLICATION NUMBER: US/09/869,198A
 ; CURRENT FILING DATE: 2001-06-21
 ; PRIOR APPLICATION NUMBER: GB 9828377.3
 ; PRIOR FILING DATE: 199-12-22
 ; PRIOR APPLICATION NUMBER: US 60/124,967
 ; PRIOR FILING DATE: 1999-03-18
 ; PRIOR APPLICATION NUMBER: US 60/164,131
 ; PRIOR FILING DATE: 1999-11-08
 ; NUMBER OF SEQ ID NOS: 97
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 29
 ; LENGTH: 132
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-09-869-198A-29

RESULT 4
 US-09-410-349A-5
 ; Sequence 5, Application US/09410349A
 ; GENERAL INFORMATION:
 ; APPLICANT: ERIKSSON, Ulf
 ; APPLICANT: AASE, Karin
 ; APPLICANT: LEE, Xuri
 ; APPLICANT: PONTEN, Annica
 ; APPLICANT: UUTELA, Marko
 ; APPLICANT: ALITALO, Kari
 ; APPLICANT: OESTMAN, Arne
 ; APPLICANT: HEIDIN, Carl-Henrik
 ; APPLICANT: BERNHOLTZ, Christer
 ; TITLE OF INVENTION: PLATELET-DERIVED GROWTH FACTOR C,
 ; FILE REFERENCE: 09-410349-Eriksson et al-1064-44740
 ; CURRENT APPLICATION NUMBER: US/09/410,349A
 ; CURRENT FILING DATE: 1999-09-30
 ; PRIOR APPLICATION NUMBER: 09-410349-Eriksson et al-1064-44740
 ; PRIOR FILING DATE: 1998-11-12
 ; PRIOR APPLICATION NUMBER: 60/108,109
 ; PRIOR FILING DATE: 1998-11-10,749
 ; PRIOR APPLICATION NUMBER: 60/110,743
 ; PRIOR FILING DATE: 1998-12-03
 ; PRIOR APPLICATION NUMBER: 60/113,002
 ; PRIOR FILING DATE: 1998-12-18
 ; PRIOR APPLICATION NUMBER: 60/135,426
 ; PRIOR FILING DATE: 1999-05-21
 ; PRIOR APPLICATION NUMBER: 60/144,022
 ; PRIOR FILING DATE: 1999-07-15
 ; NUMBER OF SEQ ID NOS: 39
 ; SEQ ID NO 5
 ; LENGTH: 318
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-09-410-349A-5

Query Match 100.0%; Score 597; DB 18; Length 318;
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 ; EARLIER APPLICATION NUMBER: 60/113,002
 ; EARLIER FILING DATE: 1998-12-18
 ; EARLIER APPLICATION NUMBER: 60/135,426
 ; EARLIER FILING DATE: 1999-05-21
 ; NUMBER OF SEQ ID NOS: 39
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 5
 ; LENGTH: 318
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; PCT-US99-22668-5

RESULT 3
 PCT-US99-22668-5
 ; Sequence 5, Application PC/TUS9922668B
 ; GENERAL INFORMATION:
 ; APPLICANT: LUDWIG INSTITUTE FOR CANCER RESEARCH
 ; HELSINKI UNIVERSITY LICENSING LTD.
 ; TITLE OF INVENTION: PLATELET-DERIVED GROWTH FACTOR C,
 ; FILE REFERENCE: PCT/US99/22669-LUDWIG INST FOR CANCER
 ; CURRENT APPLICATION NUMBER: PCT/US99/22668B
 ; CURRENT FILING DATE: 1999-09-30
 ; EARLIER APPLICATION NUMBER: 60/102,461
 ; EARLIER FILING DATE: 1998-09-10
 ; EARLIER APPLICATION NUMBER: 60/102,461
 ; EARLIER FILING DATE: 1998-11-12
 ; EARLIER APPLICATION NUMBER: 60/110,749
 ; EARLIER FILING DATE: 1998-12-03

Query Match 100.0%; Score 597; DB 18; Length 318;
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 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 ; EARLIER APPLICATION NUMBER: 60/113,002
 ; EARLIER FILING DATE: 1998-12-18
 ; EARLIER APPLICATION NUMBER: 60/135,426
 ; EARLIER FILING DATE: 1999-05-21
 ; NUMBER OF SEQ ID NOS: 39
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 5
 ; LENGTH: 318
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; PCT-US99-22668-5

Query Match 100.0%; Score 597; DB 18; Length 318;
 Best Local Similarity 100.0%; Pred. No. 2.4e-54;
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 ; EARLIER APPLICATION NUMBER: 60/113,002
 ; EARLIER FILING DATE: 1998-12-18
 ; EARLIER APPLICATION NUMBER: 60/135,426
 ; EARLIER FILING DATE: 1999-05-21
 ; NUMBER OF SEQ ID NOS: 39
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 5
 ; LENGTH: 318
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; PCT-US99-22668-5

; APPLICANT: Dijkmans, Josiena J.H.
 ; APPLICANT: Gosiewska, Anna
 ; APPLICANT: Dhanaraj, Sridevi N.
 ; APPLICANT: Xu, Jean
 ; TITLE OF INVENTION: Vascular Endothelial Growth Factor-X
 ; FILE REFERENCE: B0192/70311
 ; CURRENT APPLICATION NUMBER: US/09/468,647
 ; PRIOR APPLICATION NUMBER: GB 9828377.3
 ; PRIOR FILING DATE: 1998-12-22
 ; PRIOR APPLICATION NUMBER: US 60/124,967
 ; PRIOR FILING DATE: 1999-03-18
 ; PRIOR APPLICATION NUMBER: US 60/164,131
 ; PRIOR FILING DATE: 1999-11-08
 ; NUMBER OF SEQ ID NOS: 29
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO: 1
 ; LENGTH: 323
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-09-468-647-1

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Qy 61 KVTKKYHEVLQLRKPTGYRGLHKSLTDVALEHHEECDCVRGSTGG 106
 Db 278 KVTKKYHEVLQLRKPTGYRGLHKSLTDVALEHHEECDCVRGSTGG 323

RESULT 9
 Sequence 29, Application US/09/471179
 ; GENERAL INFORMATION:
 ; APPLICANT: Holtzman, Douglas
 ; TITLE OF INVENTION: SECRETED PROTEINS AND NUCLEIC ACIDS ENCODING THEM
 ; FILE REFERENCE: 7853-173
 ; CURRENT APPLICATION NUMBER: US/09/471,179
 ; CURRENT FILING DATE: 1999-12-23
 ; PRIOR APPLICATION NUMBER: 09/223,546
 ; PRIOR FILING DATE: 1998-12-30
 ; NUMBER OF SEQ ID NOS: 135
 ; SOFTWARE: FastSEQ for Windows Version 4.0
 ; SEQ ID NO: 29
 ; LENGTH: 323
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-09-471-179-29

Query Match 100.0%; Score 597; DB 18; Length 323;
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Qy 1 LLTEEVRLYSCTPRNFSVIREELKRTDTIFWPGCLLYKRCGGNCACCLHNCNECCQCVPS 60
 Db 218 LLTEEVRLYSCTPRNFSVIREELKRTDTIFWPGCLLYKRCGGNCACCLHNCNECCQCVPS 277

Qy 61 KVTKKYHEVLQLRKPTGYRGLHKSLTDVALEHHEECDCVRGSTGG 106
 Db 278 KVTKKYHEVLQLRKPTGYRGLHKSLTDVALEHHEECDCVRGSTGG 323

RESULT 10
 Sequence 1, Application US/09/69198A
 ; GENERAL INFORMATION:

; APPLICANT: Gordon, Robert
 ; APPLICANT: Sprangeli, Jorg
 ; APPLICANT: Von, Jeffrey
 ; APPLICANT: Dijkmans, Joslena
 ; APPLICANT: Gosiewska, Anna
 ; APPLICANT: Dhanaraj, Sridevi
 ; APPLICANT: Xu, Jean
 ; TITLE OF INVENTION: Vascular Endothelial Growth Factor-X
 ; FILE REFERENCE: 51935/2004
 ; CURRENT APPLICATION NUMBER: US/09/869,198A
 ; CURRENT FILING DATE: 2001-06-21
 ; PRIOR APPLICATION NUMBER: GB 9828377.3
 ; PRIOR FILING DATE: 1998-12-22
 ; PRIOR APPLICATION NUMBER: US 60/124,967
 ; PRIOR FILING DATE: 1999-03-18
 ; PRIOR APPLICATION NUMBER: US 60/164,131
 ; PRIOR FILING DATE: 1999-11-08
 ; NUMBER OF SEQ ID NOS: 97
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO: 1
 ; LENGTH: 323
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-09-869-198A-1

Query Match 100.0%; Score 597; DB 22; Length 323;
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Qy 61 KVTKKYHEVLQLRKPTGYRGLHKSLTDVALEHHEECDCVRGSTGG 106
 Db 278 KVTKKYHEVLQLRKPTGYRGLHKSLTDVALEHHEECDCVRGSTGG 323

RESULT 11
 PCT-US00-05918-776
 ; Sequence 776, Application PC/TUS0005918
 ; GENERAL INFORMATION:
 ; APPLICANT: Craig Rosen,
 ; APPLICANT: Steve Rubin,
 ; TITLE OF INVENTION: Human Lung Cancer Associated Gene Sequences and Polypeptides
 ; FILE REFERENCE: PA104PCT
 ; CURRENT APPLICATION NUMBER: PCT/US00/05918
 ; CURRENT FILING DATE: 2000-03-08
 ; EARLIER APPLICATION NUMBER: 60/124,270
 ; EARLIER FILING DATE: 1999-03-12
 ; NUMBER OF SEQ ID NOS: 896
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO: 776
 ; LENGTH: 339
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; PCT-US00-05918-776

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Qy 61 KVTKKYHEVLQLRKPTGYRGLHKSLTDVALEHHEECDCVRGSTGG 106
 Db 294 KVTKKYHEVLQLRKPTGYRGLHKSLTDVALEHHEECDCVRGSTGG 339

RESULT 12
 US-09-925-302-776 Application US/09925302
 ; Sequence 776, Application US/09925302
 ; GENERAL INFORMATION:
 ; APPLICANT: Rosen et al.
 ; TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
 ; FILE REFERENCE: PA104
 ; CURRENT APPLICATION NUMBER: US/09/925, 302
 ; CURRENT FILING DATE: 2001-08-10
 ; PRIORITY NUMBER: PC/TOS00/05918
 ; PRIORITY FILING DATE: 2000-03-08
 ; PRIORITY NUMBER: 60/124, 270
 ; PRIORITY FILING DATE: 1999-03-12
 ; NUMBER OF SEQ ID NOS: 896
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 4

Query Match 100.0%; Score 597; DB 1; Length 345;
 Best Local Similarity 100.0%; Pred. No. 2.6e-54;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LLTEEVRLYSCTPRNFSVIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 60
 Db 240 LLTEEVRLYSCTPRNFSVIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 299

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Qy 1 LLTEEVRLYSCTPRNFSVIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 60
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Query Match 100.0%; Score 597; DB 23; Length 339;
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 Db 300 KVTKKYHEVLQLRKPTGVRGLHKSLTVALEHHECDCVCRGSTGG 345

RESULT 15
 PCT-US99-22668-3
 ; Sequence 3, Application PC/TUS9922668B
 ; GENERAL INFORMATION:
 ; APPLICANT: LUDWIG INSTITUTE FOR CANCER RESEARCH LTD., DNA CODING
 ; TITLE OF INVENTION: PLATELET DERIVED GROWTH FACTOR C,
 ; CURRENT APPLICATION NUMBER: PCT/US99/22668B
 ; CURRENT FILING DATE: 1999-09-30
 ; EARLIER APPLICATION NUMBER: 60/104,461
 ; EARLIER FILING DATE: 1998-09-30
 ; EARLIER APPLICATION NUMBER: 60/108,109
 ; EARLIER FILING DATE: 1998-11-12
 ; EARLIER APPLICATION NUMBER: 60/110,749
 ; EARLIER FILING DATE: 1998-12-03
 ; EARLIER APPLICATION NUMBER: 60/113,002
 ; EARLIER FILING DATE: 1998-12-18
 ; EARLIER APPLICATION NUMBER: 60/135,426
 ; EARLIER FILING DATE: 1999-05-21
 ; EARLIER APPLICATION NUMBER: 60/144,022
 ; EARLIER FILING DATE: 1999-07-15
 ; NUMBER OF SEQ ID NOS: 39
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 3
 ; LENGTH: 345
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 PCT-US99-22668-3

Query Match 100.0%; Score 597; DB 1; Length 345;
 Best Local Similarity 100.0%; Pred. No. 2.6e-54;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LLTEEVRLYSCTPRNFSVIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 60
 Db 240 LLTEEVRLYSCTPRNFSVIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 299

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 Best Local Similarity 100.0%; Pred. No. 2.6e-54;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LLTEEVRLYSCTPRNFSVIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 60
 Db 240 LLTEEVRLYSCTPRNFSVIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 299

Query Match 100.0%; Score 597; DB 1; Length 345;
 Best Local Similarity 100.0%; Pred. No. 2.6e-54;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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 Db 300 KVTKKYHEVLQLRKPTGVRGLHKSLTVALEHHECDCVCRGSTGG 345

RESULT 14
 PCT-US99-15783-4
 ; Sequence 4, Application PC/TUS9915783
 ; GENERAL INFORMATION:
 ; APPLICANT: Human Genome Sciences, Inc.

Fri May 24 11:24:54 2002

us-09-695-121-2_copy_240_345.rappm

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Search completed: May 24, 2002, 10:00:56
Job time: 210 sec

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OM protein - protein search, using sw model

Run on: May 24, 2002, 09:57:46 ; Search time 10.89 Seconds
(without alignments)
275.547 Million cell updates/sec

Title: US-09-695-121-2_COPY_240_345
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Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No. Score Query Match Length DB ID Description

Result No.	Score	Query Match	Length	DB ID	Description
1	597	100.0	303	US-09-594-595D-56	Sequence 57, Appl
2	597	100.0	317	US-09-594-595D-56	Sequence 56, Appl
3	597	100.0	345	US-09-988-402A-488	Sequence 488, App
4	597	100.0	345	US-09-544-488	Sequence 488, App
5	597	100.0	345	US-09-978-681A-488	Sequence 488, App
6	597	100.0	345	US-09-987-757A-488	Sequence 488, App
7	597	100.0	345	US-09-562A-488	Sequence 488, App
8	597	100.0	345	US-09-999-831A-488	Sequence 488, App
9	597	100.0	345	US-09-544-595D-33	Sequence 33, Appl
10	597	100.0	345	US-09-829A-488	Sequence 488, App
11	597	100.0	345	US-09-978-375A-488	Sequence 488, App
12	597	100.0	345	US-10-013-922A-488	Sequence 488, App
13	597	100.0	345	US-10-013-922A-488	Sequence 488, App
14	597	100.0	345	US-10-013-918A-488	Sequence 488, App
15	597	100.0	345	US-10-017-082A-488	Sequence 488, App
16	597	100.0	345	US-10-121-049-286	Sequence 286, App
17	597	100.0	345	US-10-121-050-286	Sequence 286, App
18	597	100.0	345	US-10-121-053-286	Sequence 286, App
19	597	100.0	345	US-10-121-043-286	Sequence 286, App
20	597	100.0	345	US-10-121-044-286	Sequence 286, App
21	597	100.0	345	US-10-121-047-286	Sequence 286, App
22	597	100.0	345	US-10-121-056-286	Sequence 286, App
23	597	100.0	345	US-10-121-058-286	Sequence 286, App
24	597	100.0	345	US-10-121-057-286	Sequence 286, App
25	597	100.0	345	US-10-121-059-286	Sequence 286, App
26	597	100.0	345	US-10-121-060-286	Sequence 286, App

ALIGNMENTS

RESULT 1 US-09-564-595D-57
; Sequence 57, Application US/09564595D .

; GENERAL INFORMATION:
; APPLICANT: Gilbert, Teresa E.
; APPLICANT: Sheppard, Paul O.
; TITLE OF INVENTION: GROWTH FACTOR HOMOLOG ZVEGF4
; FILE REFERENCE: 99-19
; CURRENT APPLICATION NUMBER: US/09/564-595D
; CURRENT FILING DATE: 2000-05-03
; PRIORITY APPLICATION NUMBER: US 09/304,216
; PRIORITY FILING DATE: 1999-05-03
; PRIORITY APPLICATION NUMBER: US 60/164,463
; PRIORITY FILING DATE: 1999-11-10
; PRIORITY APPLICATION NUMBER: US 60/180,169
; PRIORITY FILING DATE: 2000-02-04
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 57
; LENGTH: 303
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: fusion polypeptide
US-09-564-595D-57

Query Match 100.0%; Score 597; DB 5; Length 303;
Best Local Similarity 100.0%; Pred. No. 1.2e-33;
Matches 106; Conservative 0; Indels 0; Gaps 0;

Qy 1 LITEEVRLYSCPRNFSVSTREELKRTDTIFPGCLLYKRGGNACCLHNCGNECCOPVS 60
Db 198 LITEEVRLYSCPRNFSVSTREELKRTDTIFPGCLLYKRGGNACCLHNCGNECCOPVS 257

Qy 61 KVTKKYHEVLQLRPTKGVRGLHKSLTDVALEHHEECDCVCRGSTGG 106
Db 258 KVTKKYHEVLQLRPTKGVRGLHKSLTDVALEHHEECDCVCRGSTGG 303

RESULT 2 US-09-564-595D-56
; Sequence 56, Application US/09564595D .

; GENERAL INFORMATION:
; APPLICANT: Gilbert, Teresa E.
; APPLICANT: Sheppard, Paul O.
; TITLE OF INVENTION: GROWTH FACTOR HOMOLOG ZVEGF4

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FILE REFERENCE: 99-19
; CURRENT APPLICATION NUMBER: US/09/564,595D
; CURRENT FILING DATE: 2000-05-03
; PRIOR APPLICATION NUMBER: US 09/304,216
; PRIOR FILING DATE: 1999-05-03
; PRIOR APPLICATION NUMBER: US 60/164,463
; PRIOR FILING DATE: 1999-11-10
; PRIOR APPLICATION NUMBER: US 60/180,169
; PRIOR FILING DATE: 2000-02-04
NUMBER OF SEQ ID NOS: 57
; SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 56
; LENGTH: 317
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE: OTHER INFORMATION: fusion polypeptide
; US-09-564-595D-56

Query Match 100.0% Score 597; DB 5; Length 317;
Best Local Similarity 100.0%; Pred. No. 1.3e-53;
Matches 106; Conservative 0; Mismatches 0; Gaps 0;

Qy 1 LLTEEVRLYSCTPRNFNSVIREELRKDTIFPGCLLIVKRCGGNCACCLHNNECCOCPVS 60
Db 212 LLTEEVRLYSCTPRNFNSVIREELRKDTIFPGCLLIVKRCGGNCACCLHNNECCOCPVS 271

Qy 61 KYTKKYHEVLQLRPKTGVRGLHKSLLTDALEHEECDCVCRGSTGG 106
Db 272 KYTKKYHEVLQLRPKTGVRGLHKSLLTDALEHEECDCVCRGSTGG 317

RESULT 3
US-09-978-403A-488
; Sequence 488, Application US/09978403A
; GENERAL INFORMATION:
; APPLICANT: Asikenaazi, Avi
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, HansPeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillian, Kenneth J.
; APPLICANT: Klijavinc, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.

; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; CURRENT APPLICATION NUMBER: US/09/978,403A
; CURRENT FILING DATE: 2002-03-19
; PRIOR APPLICATION NUMBER: 09/918885
; PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17

; PRIOR APPLICATION NUMBER: 60/064249
; PRIOR FILING DATE: 1997-11-03
; PRIOR APPLICATION NUMBER: 60/065311
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: 60/066364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: 60/077450
; PRIOR FILING DATE: 1998-03-10
; PRIOR APPLICATION NUMBER: 60/077632
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077641
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077649
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077791
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/078004
; PRIOR FILING DATE: 1998-03-13
; PRIOR APPLICATION NUMBER: 60/078886
; PRIOR FILING DATE: 1998-03-20
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; PRIOR FILING DATE: 1998-03-20
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; PRIOR FILING DATE: 1998-03-20
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; PRIOR FILING DATE: 1998-03-25
; PRIOR APPLICATION NUMBER: 60/079656
; PRIOR FILING DATE: 1998-03-26
; PRIOR APPLICATION NUMBER: 60/079664
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; PRIOR FILING DATE: 1998-03-27
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; PRIOR APPLICATION NUMBER: 60/081203
; PRIOR FILING DATE: 1998-04-09
; PRIOR APPLICATION NUMBER: 60/081229
; PRIOR FILING DATE: 1998-04-09
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; PRIOR FILING DATE: 1998-04-15
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; PRIOR APPLICATION NUMBER: 60/082797
; PRIOR FILING DATE: 1998-04-22
; PRIOR APPLICATION NUMBER: 60/082996
; PRIOR FILING DATE: 1998-04-23
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; PRIOR APPLICATION NUMBER: 60/085580
; PRIOR FILING DATE: 1998-05-15
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; PRIOR APPLICATION NUMBER: 60/085704
; PRIOR FILING DATE: 1998-05-15
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; PRIOR FILING DATE: 1998-05-15

; PRIOR APPLICATION NUMBER: 60/085582
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; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085580
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085573
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085704
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085597
; PRIOR FILING DATE: 1998-05-15

Query Match          100.0% ; Score 597; DB 5;
Best Local Similarity 100.0% ; Pred. No. 1.e-3;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy   1 LLTEEVRLYSCPTPRNSVSTIRELKTDTIFWPGCLVKRGGNCACLNHCNECCVPs 60
Db   240 LLTEEVRLYSCPTPRNSVSTIRELKTDTIFWPGCLVKRGGNCACLNHCNECCVPs 299

Qy   61 KVTKKYHEVLQLRPKTVGVRGLHKSLTDVALEHHEECDCVCRGSTGG 106
Db   300 KVTKKYHEVLQLRPKTVGVRGLHKSLTDVALEHHEECDCVCRGSTGG 345

RESULT 4 US-09-78-544A-488
; Sequence 488, Application US/09/78544A

; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Bauer Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrari, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillian, Kenneth J.
; APPLICANT: Klijavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.

; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; Acid Encoding the Same
; FILE REFERENCE: P263OPIC13
; CURRENT APPLICATION NUMBER: US/09/978-544A
; CURRENT FILING DATE: 2002-03-19
; PRIOR APPLICATION NUMBER: 09/918385
; PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/064249
; PRIOR FILING DATE: 1997-11-03
; PRIOR APPLICATION NUMBER: 60/065311
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PRIOR APPLICATION NUMBER: 60/081819
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/066364
PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/077450
PRIOR FILING DATE: 1998-03-10
PRIOR APPLICATION NUMBER: 60/077632
PRIOR FILING DATE: 1998-03-11
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PRIOR FILING DATE: 1998-03-11
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PRIOR APPLICATION NUMBER: 60/077791
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/078004
PRIOR FILING DATE: 1998-03-13
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PRIOR APPLICATION NUMBER: 60/078939
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/078936
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PRIOR APPLICATION NUMBER: 60/078910
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/078930
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PRIOR APPLICATION NUMBER: 60/078929
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PRIOR APPLICATION NUMBER: 60/079656
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PRIOR APPLICATION NUMBER: 60/079786
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PRIOR FILING DATE: 1998-03-31
PRIOR APPLICATION NUMBER: 60/080194
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PRIOR FILING DATE: 1998-04-01
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PRIOR FILING DATE: 1998-04-01
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PRIOR FILING DATE: 1998-04-01
PRIOR APPLICATION NUMBER: 60/081955
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/081817
PRIOR FILING DATE: 1998-04-15

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; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085689
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085579
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; PRIOR APPLICATION NUMBER: 60/085580
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085573
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085704
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085697
; PRIOR FILING DATE: 1998-05-15

Query Match          100.0%; Score 597; DB 5; Length: 345;
Best Local Similarity 100.0%; Pred. No. 1.4e-33;          0;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy   1 LLEEEVRLYSCPRNFNSVIRELKRTDTIWPGLLVKRGGNCACLNHCNECOPVS 60
Db   240 LLEEEVRLYSCPRNFNSVIRELKRTDTIWPGLLVKRGGNCACLNHCNECOPVS 299

Qy   61 KVTKKYHEVLQLRPKTGVRLHKSLTDVALEHHEECDCVCRGSTGG 106
Db   300 KVTKKYHEVLQLRPKTGVRLHKSLTDVALEHHEECDCVCRGSTGG 345

RESULT 5
US-09-681A-48B
; Sequence 488, Application US/09978681A
; GENERAL INFORMATION:
; APPLICANT: Aszkenazi, Avi
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferraris, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Geu, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillian, Kenneth J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2630PIC1
; CURRENT APPLICATION NUMBER: US/09/978-681A
CURRENT FILING DATE: 2002-03-19
; PRIOR APPLICATION NUMBER: 09/918565
; PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
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; PRIOR APPLICATION NUMBER: 60/065311
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: 60/066364
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; PRIOR APPLICATION NUMBER: 60/081817
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; PRIOR FILING DATE: 1998-04-22 ; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/082804 ; PRIOR APPLICATION NUMBER: 60/085697
; PRIOR FILING DATE: 1998-04-22 ; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/082700 ; Query Match 100.0%; Score 597; DB 5; Length 345;
; PRIOR FILING DATE: 1998-04-22 ; Best Local Similarity 100.0%; Pred. No. 1.4e-53;
; PRIOR APPLICATION NUMBER: 60/082797 ; Mismatches 0; Indels 0; Gaps 0;
; PRIOR FILING DATE: 1998-04-22 ;
; PRIOR APPLICATION NUMBER: 60/082796 ; Matches 106; Conservative 0;
; PRIOR FILING DATE: 1998-04-23 ; PRIOR FILING DATE: 1998-04-23
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; PRIOR FILING DATE: 1998-04-27 ; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 60/083322 ; PRIOR FILING DATE: 1998-04-28
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; PRIOR FILING DATE: 1998-04-30 ; PRIOR FILING DATE: 1998-05-05
; PRIOR APPLICATION NUMBER: 60/084366 ; PRIOR FILING DATE: 1998-05-05
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; PRIOR APPLICATION NUMBER: 60/084600 ; PRIOR FILING DATE: 1998-05-07
; PRIOR FILING DATE: 1998-05-07 ; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/084627 ; PRIOR FILING DATE: 1998-05-13
; PRIOR FILING DATE: 1998-05-07 ; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/084643 ; PRIOR FILING DATE: 1998-05-13
; PRIOR FILING DATE: 1998-05-07 ; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/085339 ; PRIOR FILING DATE: 1998-05-13
; PRIOR FILING DATE: 1998-05-13 ; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/085338 ; PRIOR FILING DATE: 1998-05-13
; PRIOR FILING DATE: 1998-05-13 ; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/085323 ; PRIOR FILING DATE: 1998-05-13
; PRIOR FILING DATE: 1998-05-13 ; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/085582 ; PRIOR FILING DATE: 1998-05-15
; PRIOR FILING DATE: 1998-05-15 ; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085689 ; PRIOR FILING DATE: 1998-05-15
; PRIOR FILING DATE: 1998-05-15 ; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/077632 ; PRIOR FILING DATE: 1998-03-10
; PRIOR APPLICATION NUMBER: 60/077632 ; PRIOR FILING DATE: 1998-03-10

RESULT 6
US-09-978-757A-488
; Sequence 418, Application US/09978757A
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker, Kevin P.
; APPLICANT: Borstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kjavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.

; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2630PIC26
; CURRENT APPLICATION NUMBER: US/09/978,757A
; CURRENT FILING DATE: 2002-03-19
; PRIOR APPLICATION NUMBER: 09/918585
; PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/064249
; PRIOR FILING DATE: 1997-11-03
; PRIOR APPLICATION NUMBER: 60/065311
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: 60/066364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: 60/077450
; PRIOR FILING DATE: 1998-03-10
; PRIOR APPLICATION NUMBER: 60/077632

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; PRIOR FILING DATE: 1998-05-15 ; PRIOR APPLICATION NUMBER: 60/077649
; PRIOR FILING DATE: 1998-05-15 ; PRIOR APPLICATION NUMBER: 60/077791
; PRIOR APPLICATION NUMBER: 1998-03-12 ; PRIOR FILING DATE: 1998-03-12
; PRIOR FILING DATE: 1998-05-15 ; PRIOR APPLICATION NUMBER: 60/078004
; PRIOR APPLICATION NUMBER: 1998-03-13 ; PRIOR FILING DATE: 1998-03-13
; PRIOR FILING DATE: 1998-05-15 ; PRIOR APPLICATION NUMBER: 60/078886
; PRIOR FILING DATE: 1998-03-20 ; PRIOR APPLICATION NUMBER: 60/078936
; PRIOR FILING DATE: 1998-03-20 ; PRIOR APPLICATION NUMBER: 60/078910
; PRIOR FILING DATE: 1998-03-20 ; PRIOR APPLICATION NUMBER: 60/078939
; PRIOR FILING DATE: 1998-03-20 ; PRIOR APPLICATION NUMBER: 60/079294
; PRIOR FILING DATE: 1998-03-25 ; PRIOR APPLICATION NUMBER: 60/079656
; PRIOR FILING DATE: 1998-03-26 ; PRIOR APPLICATION NUMBER: 60/079664
; PRIOR FILING DATE: 1998-03-27 ; PRIOR APPLICATION NUMBER: 60/079689
; PRIOR FILING DATE: 1998-03-27 ; PRIOR APPLICATION NUMBER: 60/079663
; PRIOR FILING DATE: 1998-03-27 ; PRIOR APPLICATION NUMBER: 60/079728
; PRIOR FILING DATE: 1998-03-27 ; PRIOR APPLICATION NUMBER: 60/079728
; PRIOR FILING DATE: 1998-03-27 ; PRIOR APPLICATION NUMBER: 60/079786
; PRIOR FILING DATE: 1998-03-27 ; PRIOR APPLICATION NUMBER: 60/079920
; PRIOR FILING DATE: 1998-03-30 ; PRIOR APPLICATION NUMBER: 60/079923
; PRIOR FILING DATE: 1998-03-30 ; PRIOR APPLICATION NUMBER: 60/080105
; PRIOR FILING DATE: 1998-03-31 ; PRIOR APPLICATION NUMBER: 60/080107
; PRIOR FILING DATE: 1998-03-31 ; PRIOR APPLICATION NUMBER: 60/080165
; PRIOR FILING DATE: 1998-03-31 ; PRIOR APPLICATION NUMBER: 60/080194
; PRIOR FILING DATE: 1998-03-31 ; PRIOR APPLICATION NUMBER: 60/080327
; PRIOR FILING DATE: 1998-04-01 ; PRIOR APPLICATION NUMBER: 60/080328
; PRIOR FILING DATE: 1998-04-01 ; PRIOR APPLICATION NUMBER: 60/080333
; PRIOR FILING DATE: 1998-04-01 ; PRIOR APPLICATION NUMBER: 60/080334
; PRIOR FILING DATE: 1998-04-01 ; PRIOR APPLICATION NUMBER: 60/081195
; PRIOR FILING DATE: 1998-04-08 ; PRIOR APPLICATION NUMBER: 60/081203
; PRIOR FILING DATE: 1998-04-09 ; PRIOR APPLICATION NUMBER: 60/081229
; PRIOR FILING DATE: 1998-04-09 ; PRIOR APPLICATION NUMBER: 60/081819
; PRIOR FILING DATE: 1998-04-15 ; PRIOR APPLICATION NUMBER: 60/081955
; PRIOR FILING DATE: 1998-04-15 ; PRIOR APPLICATION NUMBER: 60/081952
; PRIOR FILING DATE: 1998-04-15 ; PRIOR APPLICATION NUMBER: 60/081838
; PRIOR FILING DATE: 1998-04-15 ; PRIOR APPLICATION NUMBER: 60/082568
; PRIOR FILING DATE: 1998-04-21 ; PRIOR APPLICATION NUMBER: 60/082569
; PRIOR FILING DATE: 1998-03-11 ; PRIOR APPLICATION NUMBER: 60/082569

Query Match 100.0% ; Pred. No. 1.4e-53; Score 597; DB 5; Length 345;
Best Local Similarity 100.0%; Conservative 0; Missmatches 0; Indels 0; Gaps 0;

Qy 1 LITTEEVRLYSCTPRNFVSIREELKRTDTIFWPGCLLYVKRCGGNCACCLHNCNECCVPS 60
Db 240 LITTEEVRLYSCTPRNFVSIREELKRTDTIFWPGCLLYVKRCGGNCACCLHNCNECCVPS 299

Qy 61 KVTKKYHEVLQLRPTKGYGLHKSLTDVALEHHECDCVCRGSTGG 106
Db 300 KVTKKYHEVLQLRPTKGYGLHKSLTDVALEHHECDCVCRGSTGG 345

RESULT 7
US-09-978-564A-48B
; Sequence 48B, Application US/09978564A
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Bacon, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey E.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillian, Kenneth J.
; APPLICANT: Kijaviv, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2630P1C25
; CURRENT APPLICATION NUMBER: US/09/978,564A
; CURRENT FILING DATE: 2001-10-16
; PRIOR APPLICATION NUMBER: 09/918585
; PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/064249
; PRIOR FILING DATE: 1997-11-03
; PRIOR APPLICATION NUMBER: 60/065311
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: 60/066364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: 60/077450
; PRIOR FILING DATE: 1998-03-10
; PRIOR APPLICATION NUMBER: 60/077632
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077641
; PRIOR FILING DATE: 1998-03-11

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; PRIOR FILING DATE: 1998-04-21
; PRIOR APPLICATION NUMBER: 60/082704
; PRIOR FILING DATE: 1998-04-22
; PRIOR APPLICATION NUMBER: 60/082804
; PRIOR FILING DATE: 1998-04-22
; PRIOR APPLICATION NUMBER: 60/082700
; PRIOR FILING DATE: 1998-04-22
; PRIOR APPLICATION NUMBER: 60/082797
; PRIOR FILING DATE: 1998-04-22
; PRIOR APPLICATION NUMBER: 60/082796
; PRIOR FILING DATE: 1998-04-23
; PRIOR APPLICATION NUMBER: 60/083336
; PRIOR FILING DATE: 1998-04-27
; PRIOR APPLICATION NUMBER: 60/083322
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 60/083392
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/083495
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/083496
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/083499
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/083545
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/083554
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/083558
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/083559
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/083500
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/083742
; PRIOR FILING DATE: 1998-04-30
; PRIOR APPLICATION NUMBER: 60/084366
; PRIOR FILING DATE: 1998-05-05
; PRIOR APPLICATION NUMBER: 60/084414
; PRIOR FILING DATE: 1998-04-06
; PRIOR APPLICATION NUMBER: 60/084441
; PRIOR FILING DATE: 1998-05-06
; PRIOR APPLICATION NUMBER: 60/084637
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/084639
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/084640
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/084598
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/084600
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/084627
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/084643
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/085339
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/085338
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/085323
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/085582
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085700
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085689
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085579
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085580
; PRIOR APPLICATION NUMBER: 60/085573
; PRIOR FILING DATE: 1998-05-15

; PRIOR APPLICATION NUMBER: 60/085704
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085697
; PRIOR FILING DATE: 1998-05-15

Query Match Score 597; DB 5; Length 345;
Best Local Similarity 100.0%; Pred. No. 1.e-53;
Matches 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LLEEEVRLYSCTPRNFVSIRELKRDTIFWPGCLVKRGGNACCLNCNECCVPS 60
Db 240 LLEEEVRLYSCTPRNFVSIRELKRDTIFWPGCLVKRGGNACCLNCNECCVPS 299

Qy 61 KVTKYHEVLQLRPKNGVRGLHKSLTDVALEHHEECDCVCRGSTGG 106
Db 300 KVTKYHEVLQLRPKNGVRGLHKSLTDVALEHHEECDCVCRGSTGG 345

RESULT 8
US-09-999-831A-488
; Sequence 488, Application US/09999831A

GENERAL INFORMATION:
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gimaldi, J. Christopher *
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillian, Kenneth J.
; APPLICANT: Kijavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; APPLICANT: Yoo, Sung-Jae
; APPLICANT: Zeng, Ming

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: P230301C68
CURRENT APPLICATION NUMBER: US/09/999-831A
CURRENT FILING DATE: 2002-03-25
NUMBER OF SEQ ID NOS: 624
; Prior Application removed - See File Wrapper or Palm
SEQ ID NO 488
LENGTH: 345
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-999-831A-488

Query Match Score 597; DB 5; Length 345;
Best Local Similarity 100.0%; Pred. No. 1.e-53;
Matches 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LLEEEVRLYSCTPRNFVSIRELKRDTIFWPGCLVKRGGNACCLNCNECCVPS 60
Db 240 LLEEEVRLYSCTPRNFVSIRELKRDTIFWPGCLVKRGGNACCLNCNECCVPS 299

Qy 61 KVTKYHEVLQLRPKNGVRGLHKSLTDVALEHHEECDCVCRGSTGG 106

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RESULT 9
Db 300 KVTKYTHEVILQLRPKTGVRGLHKSLLTDVALEHHEECDCVCRGSGTGG 345
US-09-564-595D-33
; Sequence 33, Application US/09564595D
; GENERAL INFORMATION:
; APPLICANT: Gilbert, Teresa E.
; APPLICANT: Hart, Charles E.
; APPLICANT: Sheppard, Paul O.
; TITLE OF INVENTION: GROWTH FACTOR HOMOLOG ZVEGF4
; FILE REFERENCE: 99-19
; CURRENT APPLICATION NUMBER: US/09/564,595D
; CURRENT FILING DATE: 2000-05-03
; PRIOR APPLICATION NUMBER: US 09/304,216
; PRIOR FILING DATE: 1999-05-03
; PRIOR APPLICATION NUMBER: US 60/164,463
; PRIOR FILING DATE: 1999-11-10
; PRIOR APPLICATION NUMBER: US 60/180,169
; PRIOR FILING DATE: 2000-02-04
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: Fast-SEQ for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 345
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-564-595D-33

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; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2630P1C61
; CURRENT APPLICATION NUMBER: US/09/999,829A
; CURRENT FILING DATE: 2002-03-19
; NUMBER OF SEQ ID NOS: 624
; Prior Application removed - See File Wrapper or Palm
; SEQ ID NO 488
; LENGTH: 345
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-999-829A-488

Query Match          100.0% ; Score 597; DB 5; Length 345;
Best Local Similarity 100.0% ; Pred. No. 1.4e-33; Mismatches 0; Indels 0; Gaps
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps

Qy   1 LITEEVRLYSCTPRNFVSYSIREELKRTDIFWPGCLLVRKGGNACCLHNCGECQCVPY 60
Db   240 LITEEVRLYSCTPRNFVSYSIREELKRTDIFWPGCLLVRKGGNACCLHNCGECQCVPY 299

Qy   61 KVTKKHYEVQLRPLRKPTGVGLHKSITDVALEHHECDCVCRGSGG 106
Db   300 KVTKKHYEVQLRPLRKPTGVGLHKSITDVALEHHECDCVCRGSGG 345

RESULT 11
US-09-978-375A-488
Sequence 488, APPLICATION US/099783375A
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker Kevin P.
; APPLICANT: Borstein David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kjavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pau, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tunas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2630P1C24
; CURRENT APPLICATION NUMBER: US/09/978,375A
; CURRENT FILING DATE: 2002-04-19
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 624
; SEQ ID NO 488
; LENGTH: 345
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-978-375A-488

Query Match          100.0% ; Score 597; DB 5; Length 345;

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Best Local Similarity 100.0%; Pred. No. 1.4e-53; Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 12 US-10-013-921A-48B

; Sequence 488, Application US/10013921A

; GENERAL INFORMATION:

; APPLICANT: Asikenazi, Avi

; APPLICANT: Bakr, Kevin P.

; APPLICANT: Botstein, David

; APPLICANT: Desnoyers, Luc

; APPLICANT: Eaton, Dan

; APPLICANT: Ferrar, Napoleon

; APPLICANT: Filvaroff, Ellen

; APPLICANT: Fong, Sherman

; APPLICANT: Gao, Wei-Qiang

; APPLICANT: Gerber, Hanspeter

; APPLICANT: Gerritsen, Mary E.

; APPLICANT: Godowski, Paul J.

; APPLICANT: Grimaldi, J. Christopher

; APPLICANT: Gurney, Austin L.

; APPLICANT: Hillan, Kenneth J.

; APPLICANT: Klijavin, Ivar J.

; APPLICANT: Kuo, Sophia S.

; APPLICANT: Napier, Mary A.

; APPLICANT: Pan, James

; APPLICANT: Paoni, Nicholas F.

; APPLICANT: Roy, Margaret Ann

; APPLICANT: Shelton, David L.

; APPLICANT: Stewart, Timothy A.

; APPLICANT: Tumas, Daniel

; APPLICANT: Williams, P. Mickey

; APPLICANT: Wood, William I.

; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic Acid Reference: P230P1C84

; CURRENT APPLICATION NUMBER: US/10/013-921A

; CURRENT FILING DATE: 2002-03-19

; PRIOR APPLICATION NUMBER: 09/918545

; PRIOR FILING DATE: 2001-07-30

; PRIOR APPLICATION NUMBER: 60/062250

; PRIOR FILING DATE: 1997-10-17

; PRIOR APPLICATION NUMBER: 60/064249

; PRIOR FILING DATE: 1997-11-03

; PRIOR APPLICATION NUMBER: 60/065311

; PRIOR FILING DATE: 1997-11-13

; PRIOR APPLICATION NUMBER: 60/066364

; PRIOR FILING DATE: 1997-11-21

; PRIOR APPLICATION NUMBER: 60/067450

; PRIOR FILING DATE: 1998-03-10

; PRIOR APPLICATION NUMBER: 60/077632

; PRIOR FILING DATE: 1998-03-11

; PRIOR APPLICATION NUMBER: 60/077641

; PRIOR FILING DATE: 1998-03-13

; PRIOR APPLICATION NUMBER: 60/078886

; PRIOR FILING DATE: 1998-03-20

; PRIOR APPLICATION NUMBER: 60/078936

PRIOR FILING DATE: 1998-03-20

PRIOR APPLICATION NUMBER: 60/078910

PRIOR FILING DATE: 1998-03-20

PRIOR APPLICATION NUMBER: 60/079399

PRIOR FILING DATE: 1998-03-20

PRIOR APPLICATION NUMBER: 60/079294

PRIOR FILING DATE: 1998-03-25

PRIOR APPLICATION NUMBER: 60/079656

PRIOR FILING DATE: 1998-03-26

PRIOR APPLICATION NUMBER: 60/079664

PRIOR FILING DATE: 1998-03-27

PRIOR APPLICATION NUMBER: 60/079689

PRIOR FILING DATE: 1998-03-27

PRIOR APPLICATION NUMBER: 60/079663

PRIOR FILING DATE: 1998-03-27

PRIOR APPLICATION NUMBER: 60/079728

PRIOR FILING DATE: 1998-03-27

PRIOR APPLICATION NUMBER: 60/079786

PRIOR FILING DATE: 1998-03-27

PRIOR APPLICATION NUMBER: 60/079920

PRIOR FILING DATE: 1998-03-30

PRIOR APPLICATION NUMBER: 60/079923

PRIOR FILING DATE: 1998-03-30

PRIOR APPLICATION NUMBER: 60/080105

PRIOR FILING DATE: 1998-03-31

PRIOR APPLICATION NUMBER: 60/080107

PRIOR FILING DATE: 1998-03-31

PRIOR APPLICATION NUMBER: 60/080165

PRIOR FILING DATE: 1998-03-31

PRIOR APPLICATION NUMBER: 60/080194

PRIOR FILING DATE: 1998-03-31

PRIOR APPLICATION NUMBER: 60/080227

PRIOR FILING DATE: 1998-03-31

PRIOR APPLICATION NUMBER: 60/080288

PRIOR FILING DATE: 1998-03-31

PRIOR APPLICATION NUMBER: 60/080333

PRIOR FILING DATE: 1998-04-01

PRIOR APPLICATION NUMBER: 60/080344

PRIOR FILING DATE: 1998-04-01

PRIOR APPLICATION NUMBER: 60/080370

PRIOR FILING DATE: 1998-04-08

PRIOR APPLICATION NUMBER: 60/081049

PRIOR FILING DATE: 1998-04-08

PRIOR APPLICATION NUMBER: 60/081071

PRIOR FILING DATE: 1998-04-08

PRIOR APPLICATION NUMBER: 60/081195

PRIOR FILING DATE: 1998-04-08

PRIOR APPLICATION NUMBER: 60/081203

PRIOR FILING DATE: 1998-04-09

PRIOR APPLICATION NUMBER: 60/081229

PRIOR FILING DATE: 1998-04-09

PRIOR APPLICATION NUMBER: 60/081355

PRIOR FILING DATE: 1998-04-15

PRIOR APPLICATION NUMBER: 60/081817

PRIOR FILING DATE: 1998-04-15

PRIOR APPLICATION NUMBER: 60/081819

PRIOR FILING DATE: 1998-04-15

PRIOR APPLICATION NUMBER: 60/081952

PRIOR FILING DATE: 1998-04-15

PRIOR APPLICATION NUMBER: 60/081838

PRIOR FILING DATE: 1998-04-22

PRIOR APPLICATION NUMBER: 60/082568

PRIOR FILING DATE: 1998-04-22

PRIOR APPLICATION NUMBER: 60/082704

PRIOR FILING DATE: 1998-04-22

PRIOR APPLICATION NUMBER: 60/08277

PRIOR FILING DATE: 1998-04-22

PRIOR APPLICATION NUMBER: 60/082796
 PRIOR FILING DATE: 1998-04-23
 PRIOR APPLICATION NUMBER: 60/083336
 PRIOR FILING DATE: 1998-04-27
 PRIOR APPLICATION NUMBER: 60/083322
 PRIOR FILING DATE: 1998-04-28
 PRIOR APPLICATION NUMBER: 60/083392
 PRIOR FILING DATE: 1998-04-29
 PRIOR APPLICATION NUMBER: 60/083495
 PRIOR FILING DATE: 1998-04-29
 PRIOR APPLICATION NUMBER: 60/083496
 PRIOR FILING DATE: 1998-04-29
 PRIOR APPLICATION NUMBER: 60/083499
 PRIOR FILING DATE: 1998-04-29
 PRIOR APPLICATION NUMBER: 60/083545
 PRIOR FILING DATE: 1998-04-29
 PRIOR APPLICATION NUMBER: 60/083554
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 PRIOR APPLICATION NUMBER: 60/083558
 PRIOR FILING DATE: 1998-04-29
 PRIOR APPLICATION NUMBER: 60/083559
 PRIOR FILING DATE: 1998-04-29
 PRIOR APPLICATION NUMBER: 60/083500
 PRIOR FILING DATE: 1998-04-29
 PRIOR APPLICATION NUMBER: 60/083742
 PRIOR FILING DATE: 1998-04-30
 PRIOR APPLICATION NUMBER: 60/084366
 PRIOR FILING DATE: 1998-05-05
 PRIOR APPLICATION NUMBER: 60/084414
 PRIOR FILING DATE: 1998-05-06
 PRIOR APPLICATION NUMBER: 60/084441
 PRIOR FILING DATE: 1998-05-06
 PRIOR APPLICATION NUMBER: 60/084637
 PRIOR FILING DATE: 1998-05-07
 PRIOR APPLICATION NUMBER: 60/084639
 PRIOR FILING DATE: 1998-05-07
 PRIOR APPLICATION NUMBER: 60/084640
 PRIOR FILING DATE: 1998-05-07
 PRIOR APPLICATION NUMBER: 60/084637
 PRIOR FILING DATE: 1998-05-07
 PRIOR APPLICATION NUMBER: 60/084600
 PRIOR FILING DATE: 1998-05-07
 PRIOR APPLICATION NUMBER: 60/084627
 PRIOR FILING DATE: 1998-05-07
 PRIOR APPLICATION NUMBER: 60/084598
 PRIOR FILING DATE: 1998-05-07
 PRIOR APPLICATION NUMBER: 60/084643
 PRIOR FILING DATE: 1998-05-07
 PRIOR APPLICATION NUMBER: 60/085339
 PRIOR FILING DATE: 1998-05-13
 PRIOR APPLICATION NUMBER: 60/085338
 PRIOR FILING DATE: 1998-05-13
 PRIOR APPLICATION NUMBER: 60/085323
 PRIOR FILING DATE: 1998-05-13
 PRIOR APPLICATION NUMBER: 60/085582
 PRIOR FILING DATE: 1998-05-15
 PRIOR APPLICATION NUMBER: 60/085580
 PRIOR FILING DATE: 1998-05-15
 PRIOR APPLICATION NUMBER: 60/085573
 PRIOR FILING DATE: 1998-05-15
 PRIOR APPLICATION NUMBER: 60/085579
 PRIOR FILING DATE: 1998-05-15
 PRIOR APPLICATION NUMBER: 60/085704
 PRIOR FILING DATE: 1998-05-15
 PRIOR APPLICATION NUMBER: 60/085697
 PRIOR FILING DATE: 1998-05-15

QY 1 LLTEEVRLYSCTPRNFSVSYIREBLKRDTTIFWPGCLLVKRCGGNCACCLHNNECQCVPs 60
 Db 240 LLTEEVRLYSCTPRNFSVSYIREBLKRDTTIFWPGCLLVKRCGGNCACCLHNNECQCVPs 299

Qy 61 KVTKKYHEVLQLRPTKGYRGLHKSLTDVALEHHECDVCVRGSTGG 106
 Db 300 KVTKKYHEVLQLRPTKGYRGLHKSLTDVALEHHECDVCVRGSTGG 345

RESULT 13
 US-10-013-929A-488
 Sequence 488, Application US/10013929A
 ; GENERAL INFORMATION:
 ; APPLICANT: Ashkenazi, Avi
 ; APPLICANT: Baker, Kevin P.
 ; APPLICANT: Botstein, David
 ; APPLICANT: Desnoyers, Luc
 ; APPLICANT: Eaton, Dan
 ; APPLICANT: Ferrara, Napoleon
 ; APPLICANT: Filvaroff, Ellen
 ; APPLICANT: Fong, Sherman
 ; APPLICANT: Gao, Wei-Qiang
 ; APPLICANT: Gerber, Hanspeter
 ; APPLICANT: Gerritsen, Mary E.
 ; APPLICANT: Goddard, Audrey
 ; APPLICANT: Godowski, Paul J.
 ; APPLICANT: Grimaldi, J. Christopher
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Hillian, Kenneth J.
 ; APPLICANT: Kijavin, Ivar J.
 ; APPLICANT: Stewart, Timothy A.
 ; APPLICANT: Kuo, Sophia S.
 ; APPLICANT: Tumas, Daniel
 ; APPLICANT: Napier, Mary A.
 ; APPLICANT: Pau, James
 ; APPLICANT: Paoni, Nicholas F.
 ; APPLICANT: Roy, Margaret Ann
 ; APPLICANT: Shelton, David L.
 ; APPLICANT: Stewart, Timothy A.
 ; APPLICANT: Williams, P. Mickey
 ; APPLICANT: Wood, William I.
 ; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
 ; ACIDS Encoding the Same
 ; CURRENT APPLICATION NUMBER: US/10/013,929A
 ; CURRENT FILING DATE: 2002-03-19
 ; PRIOR APPLICATION NUMBER: 09/918585
 ; PRIOR FILING DATE: 2001-07-30
 ; PRIOR APPLICATION NUMBER: 60/062250
 ; PRIOR FILING DATE: 1997-10-17
 ; PRIOR APPLICATION NUMBER: 60/064249
 ; PRIOR FILING DATE: 1997-11-03
 ; PRIOR APPLICATION NUMBER: 60/065311
 ; PRIOR FILING DATE: 1997-11-13
 ; PRIOR APPLICATION NUMBER: 60/066364
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 ; PRIOR APPLICATION NUMBER: 60/078336
 ; PRIOR FILING DATE: 1998-03-20
 ; PRIOR APPLICATION NUMBER: 60/078910
 ; PRIOR FILING DATE: 1998-03-20

Query Match 100.0% Score 597; DB 6;
 Best Local Similarity 100.0% Pred. No. 1.4e-51;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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; PRIOR FILING DATE: 1998-05-15

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Query Match Score 597; DB 6; Length 345;
Best Local Similarity 100.0%; Pred. No. 1.e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 240 LITTEVRLYSCPRNFSYSIREELKRTDTIFWFGCLLYKRCGGNCACCLHNCNECQCVPs 299

Qy 61 KVTKKYHEVQLRPTGVRLHKS LTDVALEHHEECDVCRGSTGG 106
 Db 300 KVTKKYHEVQLRPTGVRLHKS LTDVALEHHEECDVCRGSTGG 345

RESULT 14

; Sequence 488, Application US/10013918A

; GENERAL INFORMATION:

; APPLICANT: Ashkenazi, Avi

; APPLICANT: Baker, Kevin P.

; APPLICANT: Botstein, David

; APPLICANT: Desnoyers, Luc

; APPLICANT: Eaton, Dan

; APPLICANT: Ferrara, Napoleon

; APPLICANT: Flivavoff, Eileen

; APPLICANT: Fong, Sherman

; APPLICANT: Gao, Wei-Qiang

; APPLICANT: Gerber, Hanspeter

; APPLICANT: Gerritsen, Mary E.

; APPLICANT: Goddard, Audrey

; APPLICANT: Godowski, Paul J.

; APPLICANT: Grimaldi, J. Christopher

; APPLICANT: Gurley, Austin L.

; APPLICANT: Hillen, Kenneth J.

; APPLICANT: Klijavin, Ivar J.

; APPLICANT: Kuo, Sophia S.

; APPLICANT: Napier, Mary A.

; APPLICANT: Pan, James

; APPLICANT: Paoni, Nicholas F.

; APPLICANT: Roy, Margaret Ann

; APPLICANT: Sheltton, David L.

; APPLICANT: Stewart, Timothy A.

; APPLICANT: Williams, P. Mickey

; APPLICANT: Wood, William J.

; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic Acid Encoding the Same

; FILE REFERENCE: P2630P1C77

; CURRENT APPLICATION NUMBER: US/10/013,918A

; CURRENT FILING DATE: 2002-03-25

; PRIOR APPLICATION NUMBER: 09/918585

; PRIOR FILING DATE: 2001-07-30

; PRIOR APPLICATION NUMBER: 60/062250

; PRIOR FILING DATE: 1997-10-17

; PRIOR APPLICATION NUMBER: 60/064249

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; PRIOR FILING DATE: 1998-05-15

Query Match 100.0%; Score 597; DB 6; Length 345;
Best Local Similarity 100.0%; Pred. No. 1.4e-53; Indels 0; Gaps 0;

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DB 240 LITTEYRLYSCTPRNFSVSTREELKRTDTIWFPGCLLVRKGNGACCLNCNECQCVPS 299
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; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Fivaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Oiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillian, Kenneth J.
; APPLICANT: Kliavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoli, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William L.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; ACIDS Encoding the Same
; FILE REFERENCE: P26301C71
; CURRENT APPLICATION NUMBER: US/10/017,082A
; CURRENT FILING DATE: 2002-03-25
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PRIOR APPLICATION NUMBER: 60/083322
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PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083495

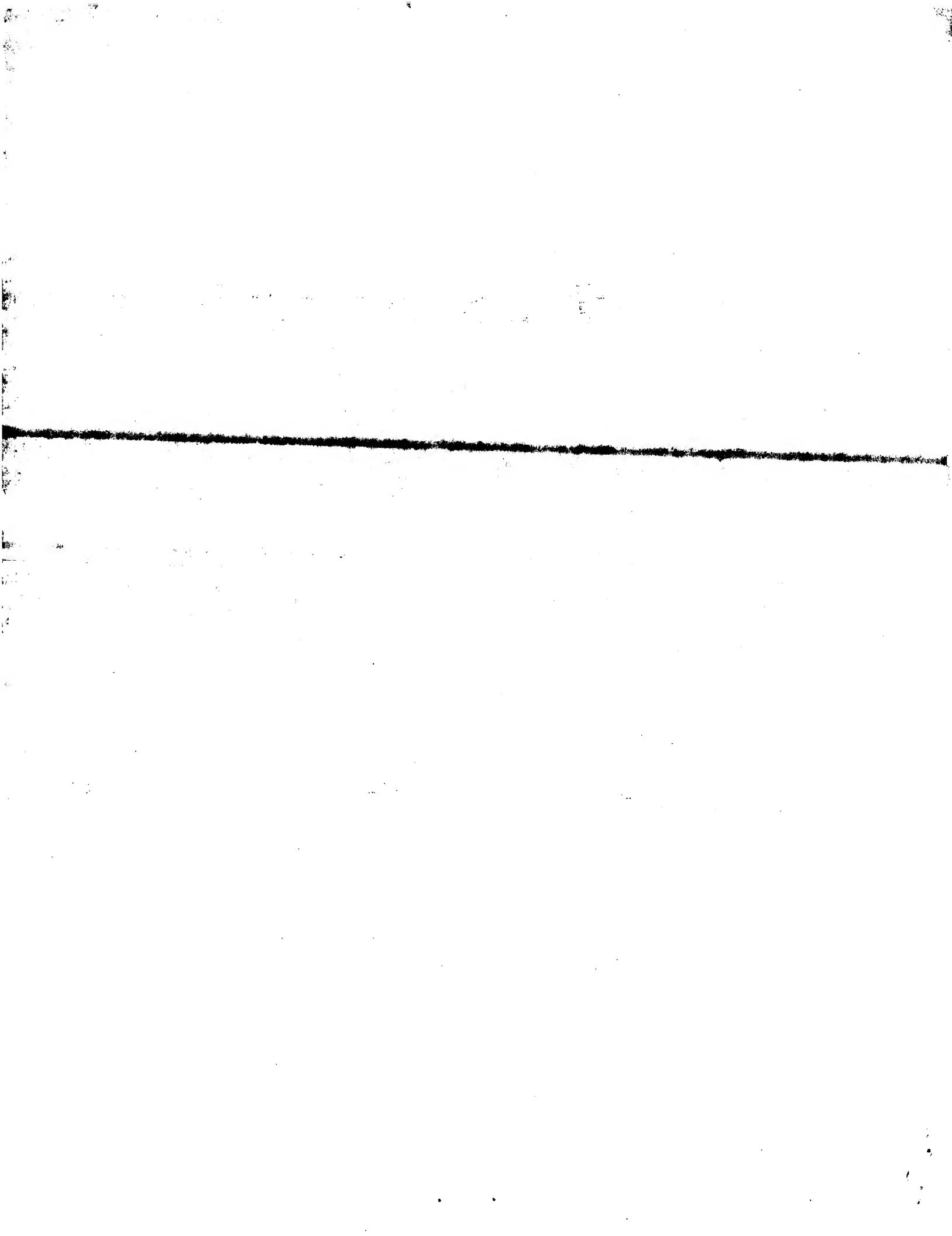
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yy						
bb						

Fri May 24 11:24:54 2002

us-09-695-121-2_copy_240_345.rapn

Page 17

Search completed: May 24, 2002, 10:01:13
Job time: 207 sec



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OM protein - protein search, using sw model

Run on : May 24, 2002, 09:52:46 : Search time 31.01 Seconds

(without alignments)

379.678 Million cell updates/sec

Title: US-09-695-121-2_COPY_240_345
Perfect score: 597

Sequence: 1 LTTEEYRLYSTPRNFSVSI..... DVALEHHEECDYCVRGSTGG 106

Scoring table: BL0SUM62

Gapop 10.0 , Gapext. 0.5

Searched: 747574 seqs, 111073796 residues

Total number of hits satisfying chosen parameters:

747574

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A_Geneseq_032802:*

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21: /SIDS1/gcdata/hold geneseq/geneseqp-emb1/AA2000.DAT:*

22: /SIDS1/gcdata/hold geneseq/geneseqp-emb1/AA2001.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the total score distribution, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	597	100.0	113	21 AAB10631	Human VEGF-X prote
2	597	100.0	113	21 AAB10632	Human VEGF-X prote
3	597	100.0	121	22 AAB74334	Synthetic protein
4	597	100.0	123	22 AAB74333	Synthetic protein
5	597	100.0	149	21 AAB10642	Human VEGF-X PDGF
6	597	100.0	318	21 AAY84558	A fragment of Plat
7	597	100.0	339	21 AAB58438	Lung cancer associ
8	597	100.0	345	20 AAY33579	Human VEGF-E prote
9	597	100.0	345	20 AAY41766	Human PRO200 prote
10	597	100.0	345	20 AAY30023	Human vascular end
11	597	100.0	345	21 AAB48857	Human zvegf3, SEQ

OS Homo sapiens

XX PN WO200037641-A2.

XX PD 29-JUN-2000.

XX PF 21-DEC-1999;

99WO-US30503.

XX PR 22-DEC-1998;

98GB-0028377.

XX PR 18-MAR-1999;

99US-0124967.

XX PR 08-NOV-1999;

99US-0164131.

XX PA (JANCS) JANSSEN PHARM NV.

Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJH, Gosiewska A;

Dhanaraj SN, Xu J;

XX

ALIGNMENTS

RESULT 1
AAB10631 standard; Protein: 113 AA.
ID AAB10631
XX AC AAB10631;
XX DT 19-JAN-2001 (first entry)
XX DE Human VEGF-X protein fragment # 1.
XX KW VEGF-X; vascular endothelial growth factor; human; vulnerability; cytostatic; anti-inflammatory; antipsoriatic; antidiabetic; treatment; KW antiarthritic; vascularization regulator; cancer; psoriasis; KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair; KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore; KW venous sore; diabetic ulcer; burns; skin graft growth.
XX Homo sapiens

DR WPI: 2000-442669/38.
DR N-PSDB; AAB71936.
XX PT New vascular endothelial growth factor protein, useful for treating or preventing diseases associated with inappropriate angiogenesis activity such as cancer, rheumatoid arthritis, psoriasis and wounds -
XX PS Disclosure; Fig 1; 127pp; English.
CC This invention describes a novel vascular endothelial growth factor-X (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has pulmonary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and antidiabetic activity and acts as an angiogenesis and vascularization regulator. An antisense molecule of the invention is useful for treating or preventing cancer, rheumatoid arthritis, psoriasis and diabetic retinopathy by inhibiting angiogenic activity or inappropriate vascularization including formation and proliferation of new blood vessels, growth and development of tissues, tissue regeneration and organ and tissue repair in a subject. The products of the invention are useful for preparing medicaments for treating wounds such as dermal ulcers, pressure sores, venous sores, diabetic ulcers and burns and to promote skin graft growth, tissue repair, proliferation of new blood vessels, tissue regeneration and organ repair by promoting angiogenic activity or vascularization. This sequence represents the human VEGF-X protein described in the method of the invention.
XX Sequence 113 AA;

Query	Match	Score	Length
Qy	1 LLTEEVRLSCTPNSVSIREELKRTDTIFWPCCLIVYRCGGNCACCHNHCQCYPS 8 llteevrlsctpnsvsireelkrtdtifwpcclivycggncacchnhcqcyp 67	100.0%; 100.0%; Pred. No. 9.6e-55;	113;
Db	61 KVTKKYHEVQLLRPKTGVRGLHKSLSLTDVALEHHRECDCVCRGSGTGG 68 kvtkkyhevqlrpktgvrqlhkslsldvalheecdcvrgstgg 113	0;	
Qy	61 KVTKKYHEVQLLRPKTGVRGLHKSLSLTDVALEHHRECDCVCRGSGTGG 106	0;	
Db	68 kvtkkyhevqlrpktgvrqlhkslsldvalheecdcvrgstgg 113	0;	

RESULT 2
ID AAB10632 standard; Protein; 113 AA.
XX AC AAB10632;
XX DT 19-JAN-2001 (first entry)
XX DE Human VEGF-X protein fragment #2.

XX VEGF-X; vascular endothelial growth factor; human; pulmonary; cytostatic; KW antirheumatic; antiarthritic; antipsoriatic; regulator; cancer; psoriasis; KW angiogenesis regulator; vascularization regulator; blood vessel; organ repair; KW rheumatoid arthritis; diabetic retinopathy; wound; dermal ulcer; pressure sore; KW tissue regeneration; tissue repair; skin graft growth.
XX Venous sore; diabetic ulcer; burns; synthetic.
XX Homo sapiens.
OS PN WO200037641-A2.
XX PD 29-JUN-2000.
XX PF 21-DEC-1999; 99WO-US30503.
XX PR 22-DEC-1998; 98GB-0028377.
PR 18-MAR-1999; 99US-0124967.
PR 08-NOV-1999; 99US-0164131.
XX PA (JANIC) JANSSEN PHARM NV.

PI	Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJJ, Gostiewska A;		
PT	Dhanaraj SN, Xu J;		
XX	DR WPI: 2000-442669/38		
PT	New vascular endothelial growth factor protein, useful for treating or preventing diseases associated with inappropriate angiogenesis activity such as cancer, rheumatoid arthritis, psoriasis and wounds -		
XX	PT Disclosure; Fig 2; 127pp; English.		
CC	This invention describes a novel vascular endothelial growth factor-X (VEGF-X) Protein (Ia) and its encoding Polynucleotide (IIa) which has pulmonary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and antidiabetic activity and acts as an angiogenesis and vascularization regulator. An antisense molecule of the invention is useful for treating or preventing cancer, rheumatoid arthritis, psoriasis and diabetic retinopathy by inhibiting angiogenic activity or inappropriate vascularization including formation and proliferation of new blood vessels, growth and development of tissues, tissue regeneration and organ and tissue repair in a subject. The products of the invention are useful for preparing medicaments for treating wounds such as dermal ulcers, pressure sores, venous sores, diabetic ulcers and burns and to promote skin graft growth, tissue repair, proliferation of new blood vessels, tissue regeneration and organ repair by promoting angiogenic activity or vascularization. This sequence represents the human VEGF-X protein described in the method of the invention.		
SQ	Sequence 113 AA;		
Query	Match	Score	Length
Qy	1 LLTEEVRLSCTPNSVSIREELKRTDTIFWPCCLIVYRCGGNCACCHNHCQCYPS 8 llteevrlsctpnsvsireelkrtdtifwpcclivycggncacchnhcqcyp 67	100.0%; 100.0%; Pred. No. 9.6e-55;	113;
Db	61 KVTKKYHEVQLLRPKTGVRGLHKSLSLTDVALEHHRECDCVCRGSGTGG 106 68 kvtkkyhevqlrpktgvrqlhkslsldvalheecdcvrgstgg 113	0;	
Qy	61 KVTKKYHEVQLLRPKTGVRGLHKSLSLTDVALEHHRECDCVCRGSGTGG 106	0;	
Db	68 kvtkkyhevqlrpktgvrqlhkslsldvalheecdcvrgstgg 113	0;	
RESULT	3		
ID	AAB74034 standard; Protein; 121 AA.		
XX	XX		
AC	AAB74034;		
XX	AC AAB74034;		
DE	Synthetic protein #2.		
XX	DE Synthetic protein #2.		
XX	KW VEGF/PDGf-like factor; vascular endothelial growth factor; VEGF; KW platelet derived growth factor; PDGF; neovascularisation; disease.		
XX	KW		
OS	OS Synthetic.		
PN	PN JP2001017188-A.		
XX	XX		
PD	PD 23-JAN-2001.		
XX	XX		
PF	PF 24-APR-2000; 2000JP-0122994.		
XX	XX		
PR	PR 22-APR-1999; 99JP-0115516.		
XX	XX		
PA	PA (KYOWA HAKKO KOGYO KK,		
PA	PA (HERI-) HERIKUSU KENKUTSUO KK.		
XX	XX		
DR	DR WPI: 2001-285410/30.		
XX	XX		
PT	New VEGF/PDGf-like factor useful for the development of treating agents		

PT for diseases accompanied by accentuation of abnormal neovascularization
 PT
 XX PS Claim 8; Page 45; 52pp; Japanese.
 CC The present sequence sequence is provided in a specification relating
 CC to a novel vascular endothelial growth factor (VEGF)/platelet derived
 CC growth factor (PDGF)-like factor of 345 amino acids, or to a sequence
 CC in which at least one amino acid is deleted, replaced or added compared
 CC to the native sequence. The nucleotide sequence encoding the
 CC VEGF/PDGFLike factor may be integrated into a vector and used to
 CC transform a host cell. The VEGF/PDGFLike factor may be used in the
 CC development of agents for treating diseases associated with
 CC abnormal neovascularisation.
 XX SQ Sequence 121 AA;

Query Match 100.0%; Score 597; DB 22; Length 121;
 Best Local Similarity 100.0%; Pred. No. 1e-54; Indels 0; Gaps 0;
 Matches 106; Conservative 0; Mismatches 0;
 QY 1 LITTEEVRLYSTPRNFNSVIREELKRTDTIFPGCLLVKRCGGNCACCLHNCNECCQCVPS 60
 Db 16 llteevrllystprnfnsvireelkrtdtifpgcllvkrcggncacclhncneccqcvps 75
 QY 61 KVTKKYHEVLQLRPKTVGRGLHKSLSLTVALEHHECDVCVRGSGTGG 106
 Db 76 kvtkkyhevlqlrpktvgrglhksltvalheecdvcvrsgtgg 121

RESULT 4 AAB74033

ID AAB74033 standard; Protein; 123 AA.

AC AAB74033;

XX DT 09-AUG-2001 (first entry)

XX DE Synthetic protein #1.

XX KW VEGF/PDGF-like factor; vascular endothelial growth factor; VEGF;
 KW platelet derived growth factor; PDGF; neovascularisation; disease.
 XX OS Synthetic.

XX PN JP2001017188-A.

XX PR 22-APR-1999.

XX PD 23-JAN-2001.

XX PF 24-APR-2000; 2000JP-0122994.

XX PR 22-APR-1999; 99JP-0115516.

XX PA (KYOWA) KYOWA HAKKO KOGYO KK.

PA (HERI-) HERIKUSU KENKYUSHO KK.

XX DR WPI; 2001-28541/30.

XX PS Claim 7; Page 45; 52pp; Japanese.

XX The present sequence sequence is provided in a specification relating
 CC to a novel vascular endothelial growth factor (VEGF)/platelet derived
 CC growth factor (PDGF)-like factor of 345 amino acids, or to a sequence
 CC in which at least one amino acid is deleted, replaced or added compared
 CC to the native sequence. The nucleotide sequence encoding the
 CC VEGF/PDGFLike factor may be integrated into a vector and used to
 CC transform a host cell. The VEGF/PDGFLike factor may be used in the
 CC development of agents for treating diseases associated with

CC abnormal neovascularisation.
 XX SQ Sequence 123 AA;

Query Match 100.0%; Score 597; DB 22; Length 123;
 Best Local Similarity 100.0%; Pred. No. 1.e-54;
 Matches 106; Conservative 0; Mismatches 0;
 Indels 0; Gaps 0;
 QY 1 LITTEEVRLYSTPRNFNSVIREELKRTDTIFPGCLLVKRCGGNCACCLHNCNECCQCVPS 60
 Db 18 llteevrllystprnfnsvireelkrtdtifpgcllvkrcggncacclhncneccqcvps 77
 QY 61 KVTKKYHEVLQLRPKTVGRGLHKSLSLTVALEHHECDVCVRGSGTGG 106
 Db 78 kvtkkyhevlqlrpktvgrglhksltvalheecdvcvrsgtgg 123

RESULT 5 AAB10642

ID AAB10642 standard; Protein; 149 AA.

AC AAB10642;

XX DT 19-JAN-2001 (first entry)

XX DE Human VEGF-X PDGF-like domain protein.

XX KW VEGF-X; vascular endothelial growth factor; human; vulnery; cytostatic;

KW antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;

KW angiogenesis regulator; vascularization regulator; cancer; psoriasis;

KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;

KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;

KW venous sore; diabetic ulcer; burns; skin graft growth.

XX OS Homo sapiens.

XX PN WO2000037641-A2.

XX PD 29-JUN-2000.

XX PR 21-DEC-1999; 99WO-US30503.

XX PR 22-DEC-1998; 98GB-0028377.

XX PR 18-MAR-1999; 99US-0124967.

XX PR 08-NOV-1999; 99US-0164131.

XX PA (JANCS) JANSSEN PHARM NV.

XX DR WPI; 2000-442669/38.

DR N-PSDB; AAA1986.

XX New vascular endothelial growth factor protein, useful for treating or
 PT preventing diseases associated with inappropriate angiogenesis activity
 CC This invention describes a novel vascular endothelial growth factor-X
 CC (VEGF-X) protein (IA) and its encoding polynucleotide (IIA) which has
 CC antiangiogenic activity and acts as an angiogenesis and vascularization
 CC regulator. An antisense molecule of the invention is useful for treating
 CC or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
 CC retinopathy by inhibiting angiogenic activity or inappropriate
 CC vascularization including formation and proliferation of new blood
 CC vessels, growth and development of tissues, tissue regeneration and organ
 CC and tissue repair in a subject. The products of the invention are useful
 CC for preparing medicaments for treating wounds such as dermal ulcers,
 CC pressure sores, venous sores, diabetic ulcers and burns and to promote

CC Disclosure; Fig 24; 127pp; English.

XX The present sequence sequence is provided in a specification relating
 CC to a novel vascular endothelial growth factor (VEGF)/platelet derived
 CC growth factor (PDGF)-like factor of 345 amino acids, or to a sequence
 CC in which at least one amino acid is deleted, replaced or added compared
 CC to the native sequence. The nucleotide sequence encoding the
 CC VEGF/PDGFLike factor may be integrated into a vector and used to
 CC transform a host cell. The VEGF/PDGFLike factor may be used in the
 CC development of agents for treating diseases associated with

CC skin graft growth; tissue repair; proliferation of new blood vessels;
 CC tissue regeneration and organ repair by promoting angiogenic activity or
 CC vascularization. This sequence represents a human VEGF-X protein
 CC PDG-F-like domain which can be expressed in E. coli systems and which is
 CC described in the method of the invention.
 XX Sequence 149 AA;

Query Match 100.0%; Score 597; DB 21; Length 149;
 Best Local Similarity 100.0%; Pred. No. 1 3e-54;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLTEEVRLYSCTPRNFSVSTREELKRTDTIWFPGCLLYKRCGGNCACCUHNCNECQCVPs 60
 Db 44 llteevrllyscptprnfsvstrelkrtdtiwfpgcllykrcggncacchncnecqcvps 103
 QY 61 KVTKKYHEVQLRPLPKTGVRGLHKSLTDVALEHHECDCVCRGSTGG 106
 Db 104 kvtkkyhevqlrplktgvrqlhksldvaledheecdvcrgstgg 149

RESULT 6

AYA84558 standard; Protein; 318 AA.
 ID AYA84558
 XX DT 25-JUL-2000 (first entry)
 DE A fragment of platelet-derived growth factor C (PDGF-C).

XX Platelet-derived growth factor C; PDGF-C; cell proliferation;
 KW growth factor; heparin; connective tissue; wound healing; VEGF-F;
 KW fibroblast mitogenesis; PDGF alpha receptor activation; tumour growth;
 KW choriocarcinoma; Wilms tumour; megakaryoblastic leukaemia;
 KW lung carcinoma; erythroleukemia; tissue remodelling.

XX OS Homo sapiens.

XX PH Location/Qualifiers
 FT Misc-difference 287
 FT /note= "encoded by AAS"
 XX PN WO200018212-A2.
 XX PD 06-APR-2000.
 XX PR 30-SEP-1999; 99WO-US22668.
 XX PR 30-SEP-1998; 98US-0102461.
 PR 12-NOV-1998; 98US-0109109.
 PR 03-DEC-1998; 98US-0110749.
 PR 18-DEC-1998; 98US-0113002.
 PR 21-MAY-1999; 99US-01215426.
 PR 15-JUL-1999; 99US-0144022.

XX PA (LUDWIG) LUDWIG INST CANCER RES.

PA (UTHE) UNIV HELSINKI LICENSING LTD.

XX PI Eriksson U, Aase K, Lee X, Ponten A, Utetela M, Alitalo K;

PI Oestman A, Heldin C, Betsholtz C;

XX DR WPI: 2000-292954/25.

DR DR N-PSDB; AAA1524.

XX PT Novel DNA encoding PDGF-C useful to stimulate or enhance proliferation,
 PT differentiation, growth and motility of cells expressing the PDGF-C
 PT receptor -
 PS Disclosure; Fig 4; 135PP; English.
 XX The present sequence represents a human platelet-derived growth factor C

CC (PDGF-C) (formally designated VEGF-F) fragment. PDGF-C polypeptides have
 CC the ability to stimulate and enhance proliferation or differentiation,
 CC and/or growth or motility of cells expressing a PDGF-C receptor.
 CC PDGF-C polypeptides can be used in pharmaceuticals for promoting cell
 CC proliferation, preferentially in combination with one other growth factor
 CC and heparin. Pharmaceuticals comprising PDGF-C polypeptides can also
 CC be used for stimulating connective tissue or wound healing. The
 CC PDGF-C polypeptide can be enzymatically processed to generate the active
 CC truncated form of PDGF-C and used to regulate the receptor-binding
 CC specificity of PDGF-C. PDGF-C can also be used to promote fibroblast
 CC mitogenesis in a mammal and to induce PDGF alpha receptor activation.
 CC PDGF-C antagonists can be used to inhibit tumour growth of a tumour
 CC expressing PDGF-C in a mammal. Specific types of human tumours, e.g.
 CC choriocarcinoma, Wilms tumour, megakaryoblastic leukaemia, lung carcinoma
 CC and erythroleukemia, can be identified by testing for expression of
 CC PDGF-C. PDGF-C antagonists can also be used to inhibit tissue
 CC remodelling during invasion of tumour cells into a normal population of
 CC cells. Antagonists can also be used to treat fibrotic conditions,
 CC especially found in the lung, kidney or liver.
 XX SQ Sequence 318 AA;

Query Match 100.0%; Score 597; DB 21;
 Best Local Similarity 100.0%; Pred. No. 2 9e-54;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLTEEVRLYSCTPRNFSVSTREELKRTDTIWFPGCLLYKRCGGNCACCUHNCNECQCVPs 60
 Db 213 llteevrllyscptprnfsireelkrtdtiwfpgcllykrcggncacchncnecqcvps 272

QY 61 KVTKKYHEVQLRPLPKTGVRGLHKSLTDVALEHHECDCVCRGSTGG 106
 Db 273 kvtkkyhevqlrplktgvrqlhksldvaledheecdvcrgstgg 318

RESULT 7

AAB58438 standard; Protein; 339 AA.

ID AAB58438
 XX AC AAB58438;
 XX DT 14-MAR-2001 (first entry)
 XX DE Lung cancer associated polypeptide sequence SEQ ID 776.
 XX KW Human; lung cancer associated protein; neuroprotective; cytostatic;
 KW cardioactive; immunomodulatory; muscular active; pulmonary;
 KW gastrointestinal; nephrotropic; antiinfective; gynecological;
 KW antibacterial; diagnosis; neural disorder; immune disorder; reproductive;
 KW proliferative disorder; wound healing; infectious disease.
 XX OS Homo sapiens.
 XX PN WO200055180-A2.
 XX PD 21-SEP-2000.
 XX PF 08-MAR-2000; 2000WO-US05918.
 XX PR 12-MAR-1999; 99US-0124270.
 XX PA (HUMA-) HUMAN GENOME SCI INC.
 PA (ROSE-) ROSEN C A.
 PA (ROSE-) ROSEN C A.
 XX PI Ruben SM;
 XX DR WPI: 2000-587514/55.
 DR N-PSDB; AAF18314.
 XX PT Lung cancer associated gene sequences, referred to as lung cancer
 PT antigens, useful for treatment, prevention, and diagnosis of disorders
 PT such as lung cancer -

XX Claim 11; Page 1305-1306; 1425pp; English.

XX Polynucleotide sequences AAF17982 - AAF1824 encode human lung cancer associated proteins represented in AAB58106 - AAB58548. Lung cancer associated proteins and polynucleotide sequences, their agonists, and antagonists may have neuroprotective, cytostatic, cardiotoxic, immunomodulatory, muscular active general, pulmonary, gastrointestinal general, nephrotoxic, antinfective, gynecological, or antibacterial activity. The invention also includes antibodies specific for the protein or polynucleotide sequences. The lung cancer associated polynucleotide sequences may be used for detection of lung cancer, chromosome identification, as chromosome markers, and for numerous other diagnostic or research purposes. The proteins may be used to treat disorders such as neural, immune, muscular, reproductive, gastrointestinal, pulmonary, cardiovascular, renal, and proliferative disorders. The proteins may also be used in the treatment of wounds and infectious diseases. Polynucleotide sequences AAF1825 - AAF1843 and peptide AAB5849 are used in the course of the invention for the identification and characterisation of the polynucleotide and protein sequences.

XX Sequence 339 AA;

Query Match 100.0%; Score 597; DB 21; Length 339;
Best Local Similarity 100.0%; Pred. No. 3.1e-54;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LLEEEVRLYSCTRPRNSVSTIREELKRTDTIWFPGCLLYKRCGGNCACCLHNCNECCQVPS 60
Db 234 llteevrllyscsprnsfsvsireelkttdtifpgcllykrcggncacclhncneccqvps 293

Qy 61 KVTKKYHEVQLQPLPKTGVRGLHSLSLTDALEHHEECDCVCRGSGTG 106
Db 294 kvtkkhyevqlrpktpktgvrqlksltdvalenhheecdcvcrsgtg 339

RESULT 8
ID AAY33679 standard; Protein; 345 AA.
XX AC AAY33679;
XX DT 11-JAN-2000 (first entry)
XX DE Human VEGF-E protein.

XX VEGF-E; human; vascular endothelial cell growth factor; wound repair; treatment; cardiovascular disorder; endothelial disorder; therapy; tissue generation; regeneration; cardiac hypertrophy; cancer; detection; angiogenic disorder; age-related macular degeneration; vascular disease; neovascularization; tumor; gene mapping.

XX OS Homo sapiens.
XX PN WO9947677-A2.
XX PR 23-SEP-1999.
XX PF 10-MAR-1999; 99WO-US05190.
XX PR 17-MAR-1998; 98US-0040220.
XX PR 02-NOV-1998; 98US-0184216.
XX (GETH) GENENTECH INC.
XX PI Ferrara N, Kuo SS;
XX DR WPI; 1999-580306/9.
XX N-PSDB; AAZ23691.
XX PT New growth factor polypeptide useful for treating cardiovascular or

PT XX endothelial disorders, e.g. cardiac hypertrophy -
PS XX Claim 1; Fig 2; 122pp; English.
CC This invention describes the isolation of a novel human vascular endothelial cell growth factor-E (VEGF-E) polypeptide which has CC tranquillizer, vulnerary and cardiotonic activity. VEGF-E can be administered CC therapeutically, especially by expressing encoding polynucleotides to CC treat cardiovascular or endothelial disorders in mammals, especially CC humans. It is useful in wound repair and tissue generation and CC regeneration, and may especially be used to treat cardiac hypertrophy CC It can be combined with a carrier in pharmaceutical compositions, which CC can be administered to treat disorders as above. VEGF-E can be used to CC screen for antagonists and agonists, and the antagonists administered to CC treat angiogenic disorders in mammals (especially humans) e.g. cancer or CC age-related macular degeneration. It can be used to generate antibodies, CC useful therapeutically as antagonists, as above. The antibodies are also CC useful to detect VEGF-E polypeptide, especially to diagnose CC cardiovascular, endothelial or angiogenic disorders in mammals (e.g. CC vascular disease, or reovascularization associated with tumor formation), CC by contacting the antibody with a tissue sample and detecting formation CC of an antibody-VEGF-E polypeptide complex. Polynucleotides encoding CC endothelial disorders and endothelial disorders in CC VEGF-E can be used to diagnose cardiovascular and endothelial disorders CC in mammals, by detecting abnormally high or low VEGF-E gene expression in CC tissue samples. They can also be used to diagnose a disease or CC susceptibility to a disease related to a mutated form of VEGF-E (e.g. a CC cardiovascular, endothelial or angiogenic disorder such as a tumor), by CC detecting a mutation in the VEGF-E-encoding sequence isolated from a CC sample. They may also be used to produce probes useful to detect related CC sequences or for gene mapping. This sequence represents the human VEGF-E CC protein described in the method of the invention.

SQ Sequence 345 AA;

Query Match 100.0%; Score 597; DB 20; Length 345;
Best Local Similarity 100.0%; Pred. No. 3.2e-54;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LLEEEVRLYSCTRPRNSVSTIREELKRTDTIWFPGCLLYKRCGGNCACCLHNCNECCQVPS 60
Db 240 llteevrllyscsprnsfsvsireelkttdtifpgcllykrcggncacclhncneccqvps 299

Qy 61 KVTKKYHEVQLQPLPKTGVRGLHSLSLTDALEHHEECDCVCRGSGTG 106
Db 300 kvtkkhyevqlrpktpktgvrqlksltdvalenhheecdcvcrsgtg 345

RESULT 9
ID AAY41766 standard; Protein; 345 AA.
XX AC AAY41766;
XX DT 07-DEC-1999 (first entry)
XX DE Human PRO200 protein sequence.
XX KW Human; PRO; EST; expressed sequence tag; PCR primer; hybridisation; KW probe; blood coagulation disorder; cancer; cellular adhesion disorder; KW secreted protein; transmembrane protein.
XX KW
XX OS Homo sapiens.
XX PN WO9946281-A2.
XX PR 10-MAR-1998; 98US-0077450.
XX PD 16-SEP-1999.
XX PF 08-MAR-1999; 99WO-US05028.
XX PR 11-MAR-1998; 98US-0077632.
XX PR 11-MAR-1998; 98US-0077641.

PR 11-MAR-1998; 98US-0077649.
 PR 12-MAR-1998; 98US-0077791.
 PR 13-MAR-1998; 98US-0078004.
 PR 17-MAR-1998; 98US-0040220.
 PR 20-MAR-1998; 98US-0078886.
 PR 20-MAR-1998; 98US-0078910.
 PR 20-MAR-1998; 98US-0078916.
 PR 25-MAR-1998; 98US-0078939.
 PR 25-MAR-1998; 98US-0078934.
 PR 26-MAR-1998; 98US-0079656.
 PR 27-MAR-1998; 98US-0079653.
 PR 27-MAR-1998; 98US-0079664.
 PR 27-MAR-1998; 98US-0079689.
 PR 27-MAR-1998; 98US-0079728.
 PR 27-MAR-1998; 98US-0079786.
 PR 30-MAR-1998; 98US-0079920.
 PR 30-MAR-1998; 98US-0079923.
 PR 31-MAR-1998; 98US-0080105.
 PR 31-MAR-1998; 98US-0080107.
 PR 31-MAR-1998; 98US-0080165.
 PR 31-MAR-1998; 98US-0080194.
 PR 01-APR-1998; 98US-0080327.
 PR 01-APR-1998; 98US-0080328.
 PR 01-APR-1998; 98US-0080333.
 PR 01-APR-1998; 98US-0080334.
 PR 08-APR-1998; 98US-008049.
 PR 08-APR-1998; 98US-008070.
 PR 09-APR-1998; 98US-0081071.
 PR 09-APR-1998; 98US-0081195.
 PR 09-APR-1998; 98US-0081203.
 PR 09-APR-1998; 98US-0081229.
 PR 15-APR-1998; 98US-0081817.
 PR 15-APR-1998; 98US-0081838.
 PR 15-APR-1998; 98US-0081952.
 PR 15-APR-1998; 98US-0081955.
 PR 21-APR-1998; 98US-0082568.
 PR 22-APR-1998; 98US-0082100.
 PR 22-APR-1998; 98US-0082104.
 PR 22-APR-1998; 98US-0082804.
 PR 23-APR-1998; 98US-0082267.
 PR 23-APR-1998; 98US-0082796.
 PR 27-APR-1998; 98US-0083336.
 PR 28-APR-1998; 98US-0083322.
 PR 29-APR-1998; 98US-0083392.
 PR 29-APR-1998; 98US-008495.
 PR 29-APR-1998; 98US-008496.
 PR 29-APR-1998; 98US-008499.
 PR 29-APR-1998; 98US-008500.
 PR 29-APR-1998; 98US-008545.
 PR 29-APR-1998; 98US-008554.
 PR 29-APR-1998; 98US-008558.
 PR 29-APR-1998; 98US-008559.
 PR 30-APR-1998; 98US-008742.
 PR 05-MAY-1998; 98US-0084366.
 PR 06-MAY-1998; 98US-008414.
 PR 07-MAY-1998; 98US-008441.
 PR 07-MAY-1998; 98US-008441.
 PR 07-MAY-1998; 98US-008460.
 PR 13-MAY-1998; 98US-0084627.
 PR 07-MAY-1998; 98US-0084637.
 PR 07-MAY-1998; 98US-0084639.
 PR 13-MAY-1998; 98US-0085338.
 PR 13-MAY-1998; 98US-0085339.
 PR 15-MAY-1998; 98US-008573.
 PR 15-MAY-1998; 98US-008579.
 PR 15-MAY-1998; 98US-008580.
 PR 15-MAY-1998; 98US-008582.
 PR 15-MAY-1998; 98US-0085689.
 PR 15-MAY-1998; 98US-0085697.

PR 15-MAY-1998; 98US-0085700.
 PR 15-MAY-1998; 98US-0085704.
 PR 18-MAY-1998; 98US-0086023.
 PR 22-MAY-1998; 98US-0086392.
 PR 22-MAY-1998; 98US-0086414.
 PR 22-MAY-1998; 98US-0086430.
 PR 28-MAY-1998; 98US-0086486.
 PR 28-MAY-1998; 98US-0087106.
 PR 28-MAY-1998; 98US-0087208.
 PR 30-JUL-1998; 98US-0094651.
 PR 11-SEP-1998; 98US-0100038.
 XX PA (GETH) GENENTECH INC.
 XX PI Wood WI, Goddard A, Gurney A, Yuan J, Baker KP, Chen J;
 XX DR WPI; 1999-5511358/46.
 XX N-PSDB; ANZ34296.
 XX PT New secreted and transmembrane polypeptides and their polynucleotides, cancers and cellular adhesion disorders -
 XX PT useful for treating blood coagulation disorders, cancers and cellular adhesion disorders -
 XX PS Claim 12; Fig 207; 530pp; English.
 XX CC The present invention describes secreted and transmembrane polypeptides and their polynucleotides. The nucleotide sequences are useful as sources of probes, primers, for chromosome mapping, and for generation of antisense sequences. They can also be used to create transgenic animals. The proteins can be used to treat a variety of diseases and disorders, depending on their function. Diseases that may be treated include blood coagulation disorders, cancers and cellular adhesion disorders. They may also be used to raise antibodies. AAZ33891 to AAZ34338, and AAY41685 to AAY41774 represent polynucleotide and polypeptide sequence given in. The exemplification of the present invention.
 XX SQ Sequence 345 AA;
 XX Query Match 100.0%; Score 597; DB 20;
 XX Best Local Similarity 100.0%; Pred. No. 3.2e-54;
 XX Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 LLTREPVRLYSCTPNFSVSTREEKRTDTIFWGLHKSLSLTDYALEHHEDCPCRGSTGG 60
 Db 240 11tevr1ysctpnfsvstreekrtctifwglhkslsldvahlehecdcvcrgstgg 299
 Qy 61 KVTKKYHEVQLRFLPFTGVRLHKSLSLTDYALEHHEDCPCRGSTGG 106
 Db 300 kvtkkhyevlqirptgvrqlhkslsldvahlehecdcvcrgstgg 345
 RESULT 1.0
 AAY30023 standard; Protein; 345 AA.
 ID AAY30023
 AC AAY30023;
 XX DT 11-OCT-1999 (first entry)
 XX DE Human vascular endothelial growth factor related protein.
 XX KW Vascular endothelial growth factor related protein; VEGF-R protein;
 KW tissue growth inhibition; tumour growth; cancer; tissue growth;
 KW angiogenesis; coronary artery blockage.
 XX OS Homo sapiens.
 XX PN WO937671-A1.
 XX PD 29-JUL-1999.

XX 26-JAN-1999; 99US0-US01574 . PR 10 -NOV-1999; 99US-0164463 .
 PF PR 04 -FEB-2000; 2000US-0180169 .
 XX XX
 PR 31-AUG-1998; 98US-0098548 . PA (ZYMO) ZYMOGENETICS INC.
 PR 27-JAN-1998; 98US-0072635 . XX
 PR 05-JUN-1998; 98US-0084089 . PI Gilbert T, Hart CE, Sheppard PO, Gilbertson DG;
 PR 24-JUN-1998; 98US-0090544 . XX
 XX DR WPI: 2000-687541/67 .
 PR N-PSDB; AAC81582 . DR N-PSDB; AAC81582 .
 (ELIL) LILLY & CO ELI .
 XX PS Claim 48; Page 125-126; 143pp; English .
 PT Growth factor homologs and the nucleic acids that encode them, useful
 PT e.g. for treating liver damage, ischemia, multiple sclerosis and
 PT Alzheimer's disease -
 XX XX
 DR N-PSDB; AAC80352 .
 XX PS Claim 48; Page 125-126; 143pp; English .
 PT A vascular endothelial growth factor related protein and related
 PT polynucleotide, useful for identifying antagonists and binding
 PT compounds .
 XX PS Claim 1; Page 56-58; 62pp; English .
 CC The invention relates to the human growth factor homologue zvegf4
 CC (AAB48653), and nucleic acids encoding it (AAC81555). Zvegf4 is a member
 CC of the PDGF (platelet-derived growth factor)/VEGF (vascular endothelial
 CC growth factor) family. Zvegf4 has a growth factor domain (AAB86654)
 CC characterised by a PDGF cystine knot structure, and a CUB domain
 CC (AAB48655) which has a beta barrel structure. Zvegf4 has PDGF-like
 CC activity, having mitogenic activity on fibroblasts, vascular smooth
 CC muscle cells and pericytes, and has also been shown to stimulate bone
 CC growth. The invention also relates to fusion proteins comprising human
 CC zvegf4 or fragments thereof, particularly human zvegf4/human zvegf3
 CC fusions, expression constructs and host cells comprising human zvegf4
 CC nucleic acids, the recombinant expression of human zvegf4 or a fragment thereof; a method of activating
 CC which binds to human zvegf4 or a fragment thereof; a method of activating
 CC a cell-surface PDGF receptor using a zvegf4-derived polypeptide; a
 CC method of modulating the proliferation, differentiation, migration or
 CC metabolism of bone cells, comprising exposing bone cells to
 CC zvegf4-derived polypeptides; and a method of detecting a genetic
 CC abnormality in the zvegf4 gene of a patient. Zvegf4 proteins and derived
 CC fragments may be used to stimulate tissue development or repair, or
 CC cellular differentiation or proliferation. They are particularly used for
 CC the treatment or repair of liver damage, and may also be used to
 CC modulate neurite growth (e.g., in the treatment of Alzheimer's disease or
 CC multiple sclerosis). Due to their osteogenic activity, they may be used
 CC in the treatment of periodontal disease and fractures. They may also be
 CC used to enhance expansion and mobilisation of haemopoietic stem cells
 CC and endothelial precursor stem cells, which may be useful in the
 CC treatment of ischaemia, in wound healing, and in the modulation of the
 CC immune system. The present sequence represents human zvegf3 .
 XX SQ Sequence 345 AA;
 XX SQ Sequence 345 AA;

Query Match 100.0%; Score 597; DB 20; Length 345;
 Best Local Similarity 100.0%; Pred. No. 3.2e-54;
 Matches 106; Conservative 0; Mismatches 0; Gaps 0;

QY 1 LLTBEVRLYSTCPRNFSVIREELKRTDTIFNGCLLYKRCGGNCACCLHNCNECCQCVPS 60
 Db 240 llteevrlystcprnfsvireelkrtdtifngcllykrcggncacclhncneccqcvps 299
 QY 61 KVTKKYHEVNLQLRPKTGYVRGLHKSLTDVALEHHEDCVCRSSTGG 106
 Db 300 kvtkkyhevlqlrpktgyvrghlsldvalheecdvcrgstgg 345

RESULT 11 AAB48657 Query Match 100.0%; Score 597; DB 21; Length 345;
 ID AAB48657 standard; Protein; 345 AA .
 XX Best Local Similarity 100.0%; Pred. No. 3.2e-54;
 AC AAB48657; Matches 106; Conservative 0; Mismatches 0; Gaps 0;
 XX DT 09-MAR-2001 (first entry)
 DE Human zvegf3, SEQ ID NO:33 .
 XX QY 1 LITTEEVRLYSTCPRNFSVIREELKRTDTIFNGCLLYKRCGGNCACCLHNCNECCQCVPS 60
 Db 240 llteevrlystcprnfsvireelkrtdtifngcllykrcggncacclhncneccqcvps 299
 QY 61 KVTKKYHEVNLQLRPKTGYVRGLHKSLTDVALEHHEDCVCRSSTGG 106
 Db 300 kvtkkyhevlqlrpktgyvrghlsldvalheecdvcrgstgg 345
 RESULT 12 AAB4250
 ID AAB4250 standard; Protein; 345 AA .
 AC AAB4250;
 XX DT 08-FEB-2001 (first entry)
 DE Human platelet-derived growth factor related protein LP8.
 XX KW Human; platelet derived growth factor related protein; LP8; VEGFh;
 PR 03-MAY-2000; 2000WO-US40047 .
 XX KW Human; platelet derived growth factor related protein; LP8;
 PR 03-MAY-1999; 99US-0304216 .
 KW Human; platelet-derived growth factor h; tissue regeneration; pulmonary;

atherosclerosis; PDGF-related protein; antiarteriosclerotic..

Homo sapiens.

WO200059940-A2.

12-OCT-2000.

24-MAR-2000; 2000WO-US064227.

06-APR-1999; 99US-0127913.

(ELI LILLY & CO ELI.

Hammond LJ, Na S;

WPI; 2000-6664991/64.
N-PSDB; AAC64426.

Enhancing tissue growth and promoting wound healing by administering platelet-derived growth factor related protein, LP8 or its analog and treating atherosclerosis by administering LP8 antagonist.

Claim 4: Page 63-64; 64pp; English.

The present invention describes a method for enhancing tissue growth, promoting wound healing or stimulating smooth muscle growth by administering a platelet-derived growth factor (PDGF) related protein, designated LP8 or its analogue. Also described is a method of slowing the progress of atherosclerosis or treating atherosclerosis comprising the administration of an LP8 antagonist. The method is useful for enhancing tissue growth, promoting wound healing and stimulating smooth muscle growth. Antagonists of LP8 are useful for treating atherosclerosis. The present sequence represents human LP8, which is also called VEGF_h.

Sequence	AA/ AA?	Query Match	Score	DB	Length	Indels	Gaps
		Query Match	100.0%	Score 597;	DB 21;	Length 345;	
		Best Local Similarity	100.0%	Pred. No. 3	2e-54;		
		Matches 106;	Conservative 0;	Mismatches 0;			
1	LTTEEVRLYSCPQRNFSVSIREEFLKRKDITFPGCLLVKRCGGNCACCLHNNECQCVPS	240	ltteevrlystcpqrnfsvsiireeflkrkditfpgcllvkrcggncacclhnneccqcvps	60			60
61	KTKKHYEVLQLRPKTGVRGLHKSLTDVALHEECDCVCRSTGG	345	ktkkhyevlqlrpktgvrglhksldvalheecdcvcrstgg	106			106
300	KTKKHYEVLQLRPKTGVRGLHKSLTDVALHEECDCVCRSTGG	345	ktkkhyevlqlrpktgvrglhksldvalheecdcvcrstgg	345			345

FULL 13
AAB44322 standard; Protein; 345 AA.
AAB44322;
08-FEB-2001 (first entry)
Human PRO200 (UNQ174) protein sequence SEQ ID NO:488.
Human; secreted protein; transmembrane protein; PRO; EST; cytosolic;
expressed sequence tag; detection: cancer.

Homo sapiens.
WO2000053756-A2.
14-SEP-2000.
18-FEB-2000; 2000WO-US04341.

PR	08-MAR-1999;	99W0-US05028.
PR	12-MAR-1999;	99US5-0126573.
PR	29-MAR-1999;	99US5-0126573.
PR	21-APR-1999;	99US5-0130432.
PR	28-APR-1999;	99US5-0131445.
PR	14-MAY-1999;	99US5-0134287.
PR	23-JUN-1999;	99US5-0141037.
PR	26-JUL-1999;	99US5-0146598.
PR	29-OCT-1999;	99US5-0162500.
PR	30-NOV-1999;	99W0-US28513.
PR	02-DEC-1999;	99W0-US2851.
PR	02-DEC-1999;	99W0-US28565.
PR	16-DEC-1999;	99W0-US30095.
PR	30-DEC-1999;	99W0-US31243.
PR	30-DEC-1999;	99W0-US31244.
PR	05-JAN-2000;	2000W0-US00119.
PR	06-JAN-2000;	2000W0-US00277.
PR	06-JAN-2000;	2000W0-US03376.
XX		
PA	(GETH) GENENTECH INC.	
PA	XX	
PI	Ashkenazi AJ, Baker KP, Bot	
PI	Ferrara N, Filvaroff E,	
PI	Ferrada N, Godowski PJ, Gr	
PI	Kljavin IJ, Kuo SS, Napier	
PI	Shelton DL, Stewart TA, Tun	
XXX	WPI; 2000-611443/58.	
DR	N-PSDB; AAC78582.	
XX		
PT	Novel PRO polypeptides and po	
PT	to target bioactive molecules -	
PT	cellular activities -	
XX	Claim 12: Fig 207; 636pp; Eng	
XX	AAC78458 to AAC78599 represent	
CC	sequence tag) sequences which	
CC	polypeptides. The PRO polynucleotides	
CC	activity. The polynucleotides	
CC	the presence of PRO polypep-	
CC	tides to cells and for mon-	
CC	using the polypeptides for mon-	
CC	can be used to kill the target	
CC	The polypeptide pairs provide	
CC	to cells AAC78600 to AAC78999	
CC	the isolation of the PRO poly-	
XX	Sequence 345 AA;	
SQ		
Query Match	100.0%	
Best Local Similarity	100.0%	
Matches 100;	Conservative	
QY	1 LLTPEVRLYSCTPFRNFSSIREEE	
Db	240 llteevrllysctpfrnfssireee	
QY	61 KVTKKHYHEVQLRKKTGVRGLHK	
Db	300 kvtkkhyhevqlqrkktgvrqlhks	
RESULT	14	
AAB10633	AAB10633 standard;	Protein; 3
ID	AAB10633;	
XX		
AC		
XX		
DT	19-JAN-2001 (first entry)	
DE	Human RACE generated VEGF-X F	

XX VEGF-X; vascular endothelial growth factor; human; pulmonary; cytostatic;
 KW antirheumatic; antiarthritic; antipsoriatic; treatment;
 KW angiogenesis regulator; vascularization regulator; cancer; psoriasis;
 KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
 KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
 KW venous sore; diabetic ulcer; burns; skin graft growth.
 XX OS Homo sapiens.
 XX PN WO200037641-A2.
 XX PD 29-JUN-2000.
 XX PF 21-DEC-1999; 99WO-US30503.
 XX PR 22-DEC-1998; 98GB-0028377.
 PR 18-MAR-1999; 99US-0124467.
 PR 08-NOV-1999; 99US-0124467.
 XX PA (JANCO) JANSSEN PHARM NV.
 XX PI Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJJH, Gosiewska A;
 PI Dhanaraj SN, Xu J;
 XX DR WPI: 2000-442669/38.
 DR N-PSDBB; AAA71951.
 XX PT New vascular endothelial growth factor protein, useful for treating or
 PT preventing diseases associated with inappropriate angiogenesis activity
 such as cancer, rheumatoid arthritis, psoriasis and wounds -
 XX Disclosure: Fig 6; 127pp; English.
 XX This invention describes a novel vascular endothelial growth factor-X
 CC (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has
 CC a pulmonary, cytotoxic, antiarthritic, antipsoriatic and
 CC angiogenesis and acts as an angiogenesis and vascularization
 CC regulator. An antisense molecule of the invention is useful for treating
 CC or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
 CC retinopathy by inhibiting angiogenic activity or inappropriate
 CC vascularization including formation and proliferation of new blood
 CC vessels, growth and development of tissues, tissue regeneration and organ
 CC and tissue repair in a subject. The products of the invention are useful
 CC for preparing medicaments for treating wounds such as, dermal ulcers,
 CC pressure sores, venous sores, diabetic ulcers and burns and to promote
 CC skin graft growth, tissue repair, proliferation of new blood vessels,
 CC tissue regeneration and organ repair by promoting angiogenic activity or
 CC vascularization. This sequence represents the RACE generated human VEGF-X
 protein described in the method of the invention.
 XX Sequence 345 AA;

Query Match 100.0%; Score 597; DB 21; Length 345;
 Best Local Similarity 100.0%; Pred. No. 3.2e-54;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Query 1 LLTEEVRLYSTPRNFSVSTIREELKRTDTIFWPGCLVKRQGGNCACLLNCNECCVPS 60
 Db 240 llteevrlystprnfsvstireelkrtdtifwpgclvkrggnacclhnccneccvps 299

Query 61 KVTKKYHEVILQLRKPKTVGRGLHKSLTDVALEHHEDCVCGRGSTGG 106
 Db 300 kvtkkyhevigrpktgvrghksitdvalheecdvcvrgstgg 345

RESULT 15
 ID AAB10634 standard; Protein; 345 AA.
 XX AC AAB10634;
 XX

DT 19-JAN-2001 (first entry)
 XX Human VEGF-X homologue protein.
 DE XX
 KW VEGF-X; vascular endothelial growth factor; human; pulmonary; cytostatic;
 KW antiarthritic; antiarthritic; antipsoriatic; antidiabetic; treatment;
 KW angiogenesis regulator; vascularization regulator; cancer; psoriasis;
 KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
 KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
 KW venous sore; diabetic ulcer; burns; skin graft growth.
 XX OS Homo sapiens.
 PN WO200037641-A2.
 XX PD 29-JUN-2000.
 XX PF 21-DEC-1999; 99WO-US30503.
 XX PR 22-DEC-1998; 98GB-0028377.
 PR 18-MAR-1999; 99US-0124467.
 PR 08-NOV-1999; 99US-016431.
 XX PA (JANCO) JANSSEN PHARM NV.
 XX PI Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJJH, Gosiewska A;
 PI Dhanaraj SN, Xu J;
 XX DR WPI: 2000-442669/38.
 DR N-PSDBB; AAA71952.

XX PT New vascular endothelial growth factor protein, useful for treating or
 PT preventing diseases associated with inappropriate angiogenesis activity
 such as cancer, rheumatoid arthritis, psoriasis and wounds -
 XX Disclosure: Fig 7; 127pp; English.
 XX PS This invention describes a novel vascular endothelial growth factor-X
 CC (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has
 CC a pulmonary, cytotoxic, antiarthritic, antipsoriatic and
 CC angiogenesis and acts as an angiogenesis and vascularization
 CC regulator. An antisense molecule of the invention is useful for treating
 CC or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
 CC retinopathy by inhibiting angiogenic activity or inappropriate
 CC vascularization including formation and proliferation of new blood
 CC vessels, growth and development of tissues, tissue regeneration and organ
 CC and tissue repair in a subject. The products of the invention are useful
 CC for preparing medicaments for treating wounds such as, dermal ulcers,
 CC pressure sores, venous sores, diabetic ulcers and burns and to promote
 CC skin graft growth, tissue repair, proliferation of new blood vessels,
 CC tissue regeneration and organ repair by promoting angiogenic activity or
 CC vascularization. This sequence represents the human VEGF-X protein
 XX Sequence 345 AA;

Query Match 100.0%; Score 597; DB 21; Length 345;
 Best Local Similarity 100.0%; Pred. No. 3.2e-54;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Query 1 LLTEEVRLYSTPRNFSVSTIREELKRTDTIFWPGCLVKRQGGNCACLLNCNECCVPS 60
 Db 240 llteevrlystprnfsvstireelkrtdtifwpgclvkrggnacclhnccneccvps 299

Query 61 KVTKKYHEVILQLRKPKTVGRGLHKSLTDVALEHHEDCVCGRGSTGG 106
 Db 300 kvtkkyhevigrpktgvrghksitdvalheecdvcvrgstgg 345

Search completed: May 24, 2002, 09:58:18
 Job time: 332 sec

4 protein - protein search, using sw model

Run on: May 24, 2002, 09:56:16 ; search time 13.01 Seconds
(without alignments)
199.009 Million cell, updates/sec

Title: US-09-695-121-2 COPY_240_345

Perfect score: 597

Sequence: 1 LLTVEVRLYSCTPRNFVSI.....DVALEHHBECDCYCRGSTGG 106

Scoring table: BLOSSUM62

Gapext 0.5

Searched: 231628 seqs, 24425594 residues

Total number of hits satisfying chosen parameters: 231628

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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2: /egn2_6/pptoada/2/iaa/5B_COMB.pep;*
3: /egn2_6/pptoada/2/iaa/6A_COMB.pep;*
4: /egn2_6/pptoada/2/iaa/6B_COMB.pep;*
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6: /egn2_6/pptoada/2/iaa/backtfile1.pep;*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

ALIGNMENTS

RESULT

US-08-915-795-9
Sequence 9, Application US/08915795
Patent No. 6235713

GENERAL INFORMATION:

APPLICANT: Marc G. ACHEN
APPLICANT: Andrew F. WILKS
APPLICANT: Steven A. STACKER
APPLICANT: Karl ALITALO

TITLE OF INVENTION: GROWTH FACTOR

NUMBER OF SEQUENCES: 11

CORRESPONDENCE ADDRESS:

ADDRESS: Evenson, McKeown, Edwards & Lenahan P.L.L.C.
STREET: 1200 G Street, NW, Suite 700
CITY: Washington
STATE: DC
COUNTRY: United States of America
ZIP: 20005

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION NUMBER: US/08/915,795

FILING DATE: 1/25/2000

CLASSIFICATION: 536

ATTORNEY/AGENT INFORMATION:

NAME: EVANS, JOSEPH D.
REGISTRATION NUMBER: 26,269

REFERENCE/DOCKET NUMBER: 1064/42983

TELECOMMUNICATION INFORMATION:

TELEPHONE: (202) 628-8800
TELEFAX: (202) 628-8844

TELE: N/A

INFORMATION FOR SEQ ID NO: 9:

SEQUENCE CHARACTERISTICS:

LENGTH: 321 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear

MOLECULE TYPE: protein

ORIGINAL SOURCE:

TISSUE TYPE: Mouse Lung

US-08-915-795-9

SUMMARIES

Result No.	Score	Query	Match	Length	DB ID	Description
1	115.5	19.3	321	4	US-08-915-795-9	Sequence 9, Appli
2	115.5	19.3	358	4	US-08-915-795-8	Sequence 8, Appli
3	111.5	18.7	325	4	US-08-915-795-3	Sequence 3, Appli
4	111.5	18.7	354	5	US-08-915-795-5	Sequence 5, Appli
5	105	17.6	109	1	US-08-094-079-2	Sequence 2, Appli
6	105	17.6	109	1	US-08-094-079-3	Sequence 3, Appli
7	105	17.6	109	3	US-08-804-953-3	Sequence 3, Appli
8	105	17.6	109	3	US-08-691-794-4	Sequence 4, Appli
9	105	17.6	109	5	PCT-US91-02766-18	Sequence 18, Appli
10	105	17.6	109	5	PCT-US93-02612-1	Sequence 1, Appli
11	105	17.6	109	6	5498600-3	Patent No. 5498600
12	105	17.6	119	2	US-08-257-494D-1	Sequence 1, Appli
13	105	17.6	120	6	5428135-2	Patent No. 5428135
14	105	17.6	146	3	US-08-804-989-251-2	Sequence 2, Appli
15	105	17.6	146	3	US-08-989-251-25	Sequence 25, Appli
16	105	17.6	146	3	US-09-340-250-2	Sequence 2, Appli
17	105	17.6	146	3	US-09-344-250-25	Sequence 25, Appli
18	105	17.6	146	4	US-09-528-108-2	Sequence 2, Appli
19	105	17.6	146	4	US-09-528-108-25	Sequence 25, Appli
20	105	17.6	160	1	US-08-094-079-1	Sequence 1, Appli
21	105	17.6	188	1	US-08-469-427A-11	Sequence 11, Appli
22	105	17.6	188	2	US-08-609-443B-11	Sequence 11, Appli
23	105	17.6	188	2	US-08-569-063C-11	Sequence 11, Appli
24	105	17.6	188	4	US-08-795-430-57	Sequence 25, Appli
25	105	17.6	190	3	US-08-867-352-25	Sequence 25, Appli
26	105	17.6	205	3	US-08-988-251-37	Sequence 27, Appli
27	105	17.6	205	3	US-08-988-251-37	Sequence 37, Appli

Query Match Score 115.5; DB 4;
Matches 27, Pred. No. 4; e-05;
Mismatches 41; Indels 15; Gaps 3

Best Local Similarity 3.06%; Matches 35; Conservative 15;

Qy 1 LLTEEVRLYSCTPRNFSVSTREEL-KRDTTIFPGCLLVKRGGNACCLHNCNECOV- 58
 ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: :::::
 Db 101 VIDEEWQRQCSPRETCVASELGKTTNFFKPPCVMVRFCGG--CC--NEEGVMCMN 155
 Qy 59 --PSKVTKYHEVLQLRPTGVRLHKSLTDALEHHBECDCYCRG 102
 Db 156 TSTSYISKOLFELSY--PLTSV---PELVPKIANHTGCKCLPTG 195

RESULT 2
 US-08-915-795-8
 ; Sequence 8, Application US/08915795
 ; Patent No. 6235713
 ; GENERAL INFORMATION:
 ; APPLICANT: Marc G. ACHEN
 ; APPLICANT: Andrew F. WILKS
 ; APPLICANT: Steven A. STACKER
 ; APPLICANT: Kari ALITALO
 ; TITLE OF INVENTION: GROWTH FACTOR
 ; NUMBER OF SEQUENCES: 11
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Evenson, McKeown, Edwards & Lenahan P.L.L.C.
 ; STREET: 1200 G Street, NW, Suite 700
 ; CITY: Washington
 ; STATE: DC
 ; COUNTRY: United States of America
 ; ZIP: 20005
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patentin Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/915,795
 ; FILING DATE:
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: EVANS, Joseph D.
 ; REGISTRATION NUMBER: 26,269
 ; REFERENCE/DOCKET NUMBER: 1064/42983
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (202) 628-8800
 ; TELEFAX: (202) 628-8844
 ; TELEX: N/A
 ; INFORMATION FOR SEQ ID NO: 3:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 325 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: protein
 ; HYPOTHETICAL: NO
 ; ORIGINAL SOURCE: N/A
 ; TISSUE TYPE: Human Breast
 US-08-915-795-3

Query Match 19.3%; Score 115,5; DB 4; Length 358;
 Best Local Similarity 33.0%; Pred. No. 5,4e-05;
 Matches 35; Conservative 15; Mismatches 4; Indels 15; Gaps 6;

Qy 1 LLTEEVRLYSCTPRNFSVSTREEL-KRDTTIFPGCLLVKRGGNACCLHNCNECOV- 58
 ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: :::::
 Db 106 VIDEEWQRQCSPRETCVASELGKTTNFFKPPCVMVRFCGG--CC--NEEGVMCMN 160
 Qy 59 --PSKVTKYHEVLQLRPTGVRLHKSLTDALEHHBECDCYCRG 102
 Db 161 TSTSYISKOLFELSY--PLTSV---PELVPKIANHTGCKCLPTG 200

Query Match 19.3%; Score 115,5; DB 4; Length 358;
 Best Local Similarity 33.0%; Pred. No. 5,4e-05;
 Matches 35; Conservative 15; Mismatches 4; Indels 15; Gaps 6;

RESULT 4
 US-08-915-795-5
 ; Sequence 5, Application US/08915795
 ; Patent No. 6235713
 ; GENERAL INFORMATION:
 ; APPLICANT: Marc G. ACHEN
 ; APPLICANT: Andrew F. WILKS
 ; APPLICANT: Steven A. STACKER
 ; APPLICANT: Kari ALITALO
 ; TITLE OF INVENTION: GROWTH FACTOR
 ; NUMBER OF SEQUENCES: 11
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Evenson, McKeown, Edwards & Lenahan P.L.L.C.
 ; STREET: 1200 G Street, NW, Suite 700
 ; CITY: Washington

RESULT 3
 US-08-915-795-3
 ; Sequence 3, Application US/08915795

STATE: DC
 COUNTRY: United States of America
 ZIP: 20005
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/915,795
 FILING DATE:
 CLASSIFICATION: 536
 ATTORNEY/AGENT INFORMATION:
 NAME: EVANS, JOSEPH D.
 REGISTRATION NUMBER: 26,269
 REFERENCE/DOCKET NUMBER: 1064/42983
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (202) 628-0800
 TELEX: (202) 628-8844
 TELEX: N/A
 SEQUENCE INFORMATION FOR SEQ ID NO: 5:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 354 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 HYPOTHETICAL: NO
 ORIGINAL SOURCE: NO
 TISSUE TYPE: Human Lung
 US-08-915-795-5

Query Match 18.7%; Score 111.5; DB 4; Length 354;
 Best Local Similarity 32.7%; Pred. No. 0_00014;
 Matches 33; Conservative 14; Mismatches 43;
 Indels 11; Gaps 5;

Qy	1	LLTEEVRLYCLSTPRNFSVSIITREEL-KRTDTIFWPGCLLVKRGGNACCLHNCCNEC-QCV	58
Db	101	VDEEWQRQTQSPPRETCAVEASLGKSTNTFKEPPCVNVFRGG--CCNEESLICMNTS	157
Qy	59	PSKTKKYHEWLQLRPKTVGFLHKSLTVDALEHHECDCY	99
Db	158	TSYISKQLFEISV--PLTSV--PELVPKVANHTGCKCL	192

RESULT 5
 US-08-094-079-2
 Sequence 2, Application US/08094079
 Patent No. 5512545
 GENERAL INFORMATION:
 APPLICANT: COOK, Anne L
 APPLICANT: CLEMENTS, John M
 APPLICANT: CRAIG, Stewart
 APPLICANT: EDWARDS, Richard M
 APPLICANT: BROWN, David
 TITLE OF INVENTION: PDGF-B ANALOGUES
 NUMBER OF SEQUENCES: 22
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Allegretti & Witcoff, Ltd.
 STREET: 10 S. Wacker Dr.
 CITY: Chicago
 STATE: Illinois
 COUNTRY: USA
 ZIP: 60606
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/094-079
 FILING DATE: 24-JAN-1992

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; CLASSIFICATION: 435
; PRIORITY APPLICATION DATA:
;   APPLICATION NUMBER: WO PCT/GB92/00141
;   FILING DATE: 24-JAN-1992
; PRIORITY APPLICATION DATA:
;   APPLICATION NUMBER: GB 9101645.1
;   FILING DATE: 24-JAN-1991
; ATTORNEY/AGENT INFORMATION:
;   NAME: McDonnell, John J
;   REGISTRATION NUMBER: 26,949
;   REFERENCE/DOCKET NUMBER: 93,640
; TELECOMMUNICATION INFORMATION:
;   TELEPHONE: 312-715-1000
;   TELEFAX: 312-715-1234
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 109 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FEATURE:
;   NAME/KEY: Protein
;   LOCATION: 1..109
; OTHER INFORMATION: /note= "Truncated PDGF-B (PDGF-Bt)"
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US-08-094-079-2

Query Match Score 105; DB 1; Length 109;
 Best Local Similarity 33%; Pred. No. 0.00019;
 Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9

RESULT	6
US-08-094-079-3	Sequence 3, Application US/08094079
	Patent No. 5512545
	GENERAL INFORMATION:
Qy	APPLICANT: COOK, Anne L
Db	APPLICANT: CRAIG, Stewart
	APPLICANT: CLEMENTS, John M
	APPLICANT: EDWARDS, Richard M
Qy	APPLICANT: BROWN, David
	TITLE OF INVENTION: PDGF-B ANALOGUES
Db	NUMBER OF SEQUENCES: 22
	CORRESPONDENCE ADDRESS:
	ADDRESSEE: Allegretti & Witcoff, Ltd.
	STREET: 10 S. Wacker Dr.
	CITY: Chicago
	STATE: Illinois
	COUNTRY: USA
	ZIP: 60606
	COMPUTER READABLE FORM:
	MEDIUM TYPE: Floppy disk
	COMPUTER: IBM PC compatible
	OPERATING SYSTEM: PC-DOS/MS-DOS
	SOFTWARE: Patentin Release #1.0, Version #1.25
	CURRENT APPLICATION DATA:
	APPLICATION NUMBER: US/08/094,079
	FILING DATE: 24-JAN-1992
	CLASSIFICATION: 435
	PRIOR APPLICATION DATA:
	APPLICATION NUMBER: WO PCT/GB92/00141
	FILING DATE: 24-JAN-1992
	PRIOR APPLICATION DATA:

APPLICATION NUMBER: GB 9101645.1
 FILING DATE: 24-JAN-1991
 ATTORNEY/AGENT INFORMATION:
 NAME: McDowell, John J
 REGISTRATION NUMBER: 26,949
 REFERENCE/DOCKET NUMBER: 93,640
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 312-715-1000
 TELEFAX: 312-715-1234
 INFORMATION FOR SEQ ID NO: 3:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 109 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 FEATURE: protein
 NAME/KEY: protein
 LOCATION: 1..109
 OTHER INFORMATION: /note- "Truncated PDGF-B with ARG
 OTHER INFORMATION: 28 > SER (PDGF-B5)"
 US-08-094-079-3

Query Match 17.6%; Score 105; DB 1; Length 109;
 Best Local Similarity 33.3%; Pred. No. 0.00019;
 Matches 36; Conservative 12; Missmatches 34; Indels 26; Gaps 9;

Qy 2 LTEEVRLYSCTPRN -FSVSIUREELKRTDTIF --WPGCLLVKRCGGNACCLHNCNCQC 57
 Db 7 IAEPMIAECKTRTEFEIS-RSLIDRNANFLWPPCYEVQCSG ---CC -NNRNVQC 60

Qy 58 VPSKVTKYHVQLRP ---KIGV - - - RGLHSLTDVALEHHECDC 98
 Db 61 RPTQV-----QLRPVQVRKIEIVRKPIFKKAT -VTLDEHLACKC 99

RESULT 7
 US-08-094-0953-3
 Sequence 3, Application US/08804953
 Patent No. 5968778
 GENERAL INFORMATION:
 APPLICANT: Hoppe, Jürgen
 APPLICANT: Weich, Herbert
 TITLE OF INVENTION: PDGF-A, PDGF-AA, PDGF-AB,
 TITLE OF INVENTION: PHARMACEUTICALS CONTAINING
 NUMBER OF SEQUENCES: 3
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Joseph T. Eisele
 ADDRESSEE: Kane, Dalsimer, Sullivan, Kurucz,
 STREET: 711 Third Avenue
 CITY: New York
 STATE: New York
 COUNTRY: U.S.A.
 ZIP: 10017-4059

COMPUTER READABLE FORM:
 MEDIUM TYPE: 3-1/2" DISKETTE
 COMPUTER: IBM-XT COMPATIBLE
 OPERATING SYSTEM: DOS 3.3;
 SOFTWARE: WORDPERFECT 5.0
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/804,953
 FILING DATE: 24-FEB-1997
 CLASSIFICATION: 257
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 07/720,771
 FILING DATE: 08/07/91
 APPLICATION NUMBER: PCT/EP90/00063
 FILING DATE: 01/11/90
 ATTORNEY/AGENT INFORMATION:

NAME: EISELE, JOSEPH T.
 REGISTRATION NUMBER: 25,331
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (212) 687-6000
 TELEFAX: (212) 682-3485
 TELEX: (212) 426767
 INFORMATION FOR SEQ ID NO: 3:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 109 residues
 TYPE: amino acid
 STRANDEDNESS: N/A
 TOPOLOGY: Linear
 MOLECULE TYPE: Protein
 HYPOTHETICAL: Yes
 ANTI SENSE: No
 FRAGMENT TYPE:
 ORIGINAL SOURCE:
 ORGANISM:
 STRAIN: E. coli
 INDIVIDUAL ISOLATE:
 DEVELOPMENTAL STAGE:
 HAPLOTYPE:
 TISSUE TYPE:
 CELL TYPE:
 CELL LINE:
 ORGANELLE:
 IMMEDIATE SOURCE:
 CLONE: PDGF-A
 FEATURE:
 OTHER INFORMATION:
 US-08-804-953-3

Query Match 17.6%; Score 105; DB 2; Length 109;
 Best Local Similarity 33.3%; Pred. No. 0.00019;
 Matches 36; Conservative 12; Missmatches 34; Indels 26; Gaps 9;

Qy 2 LTBEVRLYSCTPRN -FSVSIUREELKRTDTIF --WPGCLLVKRCGGNACCLHNCNCQC 57
 Db 7 IAEPMIAECKTRTEFEIS-RSLIDRNANFLWPPCYEVQCSG ---CC -NNRNVQC 60

Qy 58 VPSKVTKYHVQLRP ---KIGV - - - RGLHSLTDVALEHHECDC 98
 Db 61 RPTQV-----QLRPVQVRKIEIVRKPIFKKAT -VTLDEHLACKC 99

RESULT 8
 US-08-691-794-4
 Sequence 4, Application US/08691794
 Patent No. 605428
 GENERAL INFORMATION:
 APPLICANT: Keyt, Bruce A.
 APPLICANT: Nguyen, Francis H.
 APPLICANT: Ferrara, Napoleone
 APPLICANT: Cunningham, Brian C.
 APPLICANT: Wells, James A.
 APPLICANT: Li, Bing
 TITLE OF INVENTION: Variants of Vascular Endothelial Cell Growth Factor, Their Uses, and Processes for their Production
 NUMBER OF SEQUENCES: 45
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Fiehr, Hohbach, Test, Albritton & Herbert
 STREET: Four Embarcadero Center, Suite 3400
 CITY: San Francisco
 STATE: California
 COUNTRY: United States
 ZIP: 94111-4187
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30
; APPLICATION DATA:
; APPLICATION NUMBER: US/08/691,794
; FILING DATE: 02-AUG-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/002,827
; FILING DATE: 25-AUG-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/567,200
; FILING DATE: 05-DEC-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Drieger, Walter H.
; REGISTRATION NUMBER: 24,190
; REFERENCE/DOCKET NUMBER: A-63758/WHD
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 781-1989
; TELEX: (415) 398-3249
; FAX: 910 277-299
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 109 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
; US-08-691-794-4

Query Match 17.6%; Score 105; DB 3; Length 109;
Best Local Similarity 33.3%; Pred. No. 0.00019;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;

Qy 2 LTEEVRLYSCTPRN - FSVSIREELKRTDTIF - WPGCLLVKRCGGNACCLHNCNCQC 57
Db 7 IAEPAMIAECKTRTEVEIS - RRLIDRTNAFLVNPVCYQRCSG --CC - NNRNVQC 60

Qy 58 VPSKVTKYHEVQLQRP ---KTGV ---RGLHKSLTDVALHEECDC 98
Db 61 RPTQV -----QLRPVQVRKIEIVRKKPIFKKAT - VTLEDHLACKC 99

RESULT 9
PCT-US91-02766-18

Query Match 17.6%; Score 105; DB 3; Length 109;
Best Local Similarity 33.3%; Pred. No. 0.00019;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;

Qy 2 LTEEVRLYSCTPRN - FSVSIREELKRTDTIF - WPGCLLVKRCGGNACCLHNCNCQC 57
Db 7 IAEPAMIAECKTRTEVEIS - RRLIDRTNAFLVNPVCYQRCSG --CC - NNRNVQC 60

Qy 58 VPSKVTKYHEVQLQRP ---KTGV ---RGLHKSLTDVALHEECDC 98
Db 61 RPTQV -----QLRPVQVRKIEIVRKKPIFKKAT - VTLEDHLACKC 99

RESULT 9
PCT-US91-02766-18

Query Match 17.6%; Score 105; DB 5; Length 109;
Best Local Similarity 33.3%; Pred. No. 0.00019;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;

Qy 2 LTEEVRLYSCTPRN--FSVSIREEELKRTDTIF--WPGCLLVKRGGNCACCLHNCNECC 57
 Db 7 IAEPAMIAECKTRTEFEIS-RRLDRNANFLYWPPCDEVQRSG--CC--NNRNVQC 60

Qy 58 VPSKVTKKYHEVLQLRP----KTGV--RGLHKS LTDVALEHHHECDC 98
 Db 61 RPTQV-----QLRPVQVRKIEIVRKPIFKKAT-VTLEDHLACKC 99

RESULT 11
 5498600-3

; Patent No. 5498600
 ; APPLICANT: MURRAY, MARK J.; KELLY, JAMES D.
 ; TITLE OF INVENTION: BIOLOGICALLY ACTIVE MOSAIC PROTEINS
 ; NUMBER OF SEQUENCES: 34

CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/319,776
 FILING DATE: 07-OCT-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 926,149
 FILING DATE: 05-AUG-1992
 APPLICATION NUMBER: 319,239
 FILING DATE: 11-JUL-1989
 APPLICATION NUMBER: 911,970
 FILING DATE: 15-DEC-1986
 APPLICATION NUMBER: 896,485
 FILING DATE: 3-AUG-1986
 APPLICATION NUMBER: 705,175
 FILING DATE: 25-FEB-1985
 APPLICATION NUMBER: 660,496
 FILING DATE: 12-OCT-1984
 ; SEQ ID NO:3:
 LENGTH: 109

5498600-3

Query Match 17.6%; Score 105; DB 6; Length: 109;
 Best Local Similarity 33.3%; Pred. No. 0.00019;
 Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;

RESULT 13
 5428135-2

; Patent No. 5428135
 ; APPLICANT: LIONS, DAVID E.; THOMASON, ARLEN R.
 ; TITLE OF INVENTION: PRODUCTION OF PLATELET-DERIVED GROWTH
 ; FACTOR B-CHAIN HETEROODIMERS FROM HIGH EXPRESSION HOST CELL SYSTEM
 ; NUMBER OF SEQUENCES: 10

CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/236,880
 FILING DATE: 29-APR-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 623,671
 FILING DATE: 12-DEC-1990
 ; SEQ ID NO:2:
 LENGTH: 120

5428135-2

RESULT 12
 US-08-257-494D-1

; Sequence 1, Application US/08257494D
 ; Patent No. 5863832
 ; GENERAL INFORMATION:
 ; APPLICANT: Allergan, Inc.
 ; TITLE OF INVENTION: USE OF PLATELET
 ; TITLE OF INVENTION: DERIVED GROWTH FACTOR IN OPHTHALMIC
 ; NUMBER OF SEQUENCES: 6
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Allergan, Inc.
 ; STREET: 2505 Dupont Drive
 ; CITY: Irvine
 ; STATE: California
 ; COUNTRY: USA
 ; ZIP: 92715
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Diskette, 3.50 inch,
 ; MEDIUM TYPE: 1.40MB storage
 ; COMPUTER: Apple Macintosh II
 ; OPERATING SYSTEM: Macintosh OS 7.1
 ; SOFTWARE: Microsoft Word 5.1a
 ; CURRENT APPLICATION DATA:

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; Sequence 2, Application US/08989251
; Patent No. 6017731
; GENERAL INFORMATION:
; APPLICANT: Tekamp-Olson, Patricia
; TITLE OF INVENTION: METHOD FOR EXPRESSION OF HETEROLOGOUS
; TITLE OF INVENTION: PROTEINS IN YEAST
; NUMBER OF SEQUENCES: 41
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bell Seltzer IP Group of Alston & Bird, LLP
; STREET: 3605 Glenwood Ave. Suite 310
; CITY: Raleigh
; STATE: NC
; COUNTRY: US
; ZIP: 27622
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/989, 251
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Spull, W. Murray
; REGISTRATION NUMBER: 32,943
; REFERENCE/DOCKET NUMBER: 5784-4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919 420 2202
; TELEFAX: 919 881 3175
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 146 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-989-251-25

Query Match 17.6%; Score 105; DB 3; Length 146;
Best Local Similarity 33.3%; Pred. No. 0.00027;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;
Qy 2 LTEEVRLYSCTPRN--FSVSIREELKRTDTIF--WPGCLLYKRCGGNCACCLHNCNECQC 57
Db 44 IAEPAMIAECKTRTEVIS-RLLIDTNAFLVWPPCVERCSG--CC--NNRNVQC 97
Qy 58 VPSKVTKKYHEVLQLRP---KTGV---RGLHKSLTDVALEHHEECDC 98
Db 98 RPTQV-----QLRPVQVRKIEIVRKPKIFKKAT-VTLEDHLACKC 136

Search completed: May 24, 2002, 09:58:38
Job time: 142 sec

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; Sequence 2, Application US/08989251
; Patent No. 6017731
; GENERAL INFORMATION:
; APPLICANT: Tekamp-Olson, Patricia
; TITLE OF INVENTION: METHOD FOR EXPRESSION OF HETEROLOGOUS
; TITLE OF INVENTION: PROTEINS IN YEAST
; NUMBER OF SEQUENCES: 41
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bell Seltzer IP Group of Alston & Bird, LLP
; STREET: 3605 Glenwood Ave. Suite 310
; CITY: Raleigh
; STATE: NC
; COUNTRY: US
; ZIP: 27622
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
US-08-989-251-25

Query Match 17.6%; Score 105; DB 3; Length 146;
Best Local Similarity 33.3%; Pred. No. 0.00027;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;
Qy 2 LTEEVRLYSCTPRN--FSVSIREELKRTDTIF--WPGCLLYKRCGGNCACCLHNCNECQC 57
Db 44 IAEPAMIAECKTRTEVIS-RLLIDTNAFLVWPPCVERCSG--CC--NNRNVQC 97
Qy 58 VPSKVTKKYHEVLQLRP---KTGV---RGLHKSLTDVALEHHEECDC 98
Db 98 RPTQV-----QLRPVQVRKIEIVRKPKIFKKAT-VTLEDHLACKC 136

RESULT 15
US-08-989-251-25
; Sequence 25, Application US/08989251
; Patent No. 6017731
; GENERAL INFORMATION:
; APPLICANT: Tekamp-Olson, Patricia
; TITLE OF INVENTION: METHOD FOR EXPRESSION OF HETEROLOGOUS
; TITLE OF INVENTION: PROTEINS IN YEAST
; NUMBER OF SEQUENCES: 41
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bell Seltzer IP Group of Alston & Bird, LLP
; STREET: 3605 Glenwood Ave. Suite 310
; CITY: Raleigh
; STATE: NC
; COUNTRY: US
; ZIP: 27622
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30

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similar to glibber	33	83.5	14.0	3020	2	A43922
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laminin - Hydra vu	35	79	13.2	149	2	A41236
laminin alpha-1 ch	36	77.5	13.0	3672	2	T23433
metallothionein -	37	77.5	13.0	3704	2	T37316
metallothionein ty	38	75.5	12.6	108	2	G84522
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BLOSUM62	43	71	11.9	82	2	T07076
Gapop 10.0 , Gapext 0.5	44	71	11.9	82	2	T07114
597	45	71	11.9	1188	2	D86236
May 24, 2002, 09:56:36 ; Search time 16.43 Seconds. (without alignments) 619.931 Million cell updates/sec						
protein - protein search, using sw mode						
on: May 24, 2002, 09:56:36 ; Search time 16.43 Seconds. (without alignments) 619.931 Million cell updates/sec						
title: US-09-695-121-2_COPY_240_345						
exact score: 597						
sequence: 1 LLTVEEVRLYSCTPRNFSVSI.....DVALEHEECDCVCRGSTGG 106						
scoring table: BLOSUM62						
searched: 283138 seqs, 96089334 residues						
total number of hits satisfying chosen parameters:	283138					
minimum DB seq length: 0						
maximum DB seq length: 2000000000						
start-processing: Minimum Match 0%						
Maximum Match 100%						
Listing first 45 summaries						
database :						
PIR_711;*						
1: pir1;*						
2: pir2;*						
3: pir3;*						
4: pir4;*						
RESULTS	1					
Query JC7591						
Spinal cord-derived growth factor-B precursor - human						
C;Species: Homo sapiens (man)						
C;Date: 30-Jun-2001 #sequence_revision 30-Jun-2001 #text_change 24-Aug-2001						
C;Accession: JC7591						
R;Hamada, T.; Ui-Tei, K.; Imaki, J.; Miyata, Y.						
Biochem. Biophys. Res. Commun. 280, 733-737, 2001						
A;Title: Molecular cloning of SCDF-B, a novel growth factor homologous to SCDF						
A;Reference number: JC7591; MUID:21092670; PMID:11162582						
A;Accession: JC7591						
A;Molecule type: DNA						
A;Residues: 1-370 <HAM>						
C;Cross-references: DDBJ:AB033832						
C;Genetics:						
A;Gene: scdfg-B						
F:1-17/Domain: secretary signal sequence #status predicted <SIG>						
F:18-37/Product: spinal cord-derived growth factor-B #status predicted <MAT>						
F:51-177/Region: CUB domain #status predicted						
F:222-310/Region: homologous to platelet-derived growth factor/vascular endot						
F:294-308/Region: conserved motif #status predicted						
RESULTS	2					
Query 51.2%; Score 305.5; DB 2; Length 370;						
Best local similarity 52.9%; Pred. No. 8.4e-23;						
Matches 54; Conservative 13; Mismatches 32; Indels 3; Gaps						
Query 2 LTEAVRLYSCTPRNFSVSTREELKRTDTIWPGCCLVKRGGNACCLHNHCNECCOPVSK 61						
Db 263 LNDDAKRSCTPRNFSVNTREELKANVFFPRCLLVRQCGGNGCCTNNSGTNCNSKG 322						
Query 62 VTKKYHEVQLRP---KTVGRGLHKSLTDYALEHHECDVC 100						
Db 323 TVKYHEVQLQFEPGHIKRGRAKTMLAVDQLDHERCDCIC 364						
RESULTS	2					
Query JC7592						
Spinal cord-derived growth factor-B precursor - rat						
C;Species: Rattus norvegicus (Norway rat)						
C;Date: 30-Jun-2001 #sequence_revision 30-Jun-2001 #text_change 24-Aug-2001						
C;Accession: JC7592						
R;Hamada, T.; Ui-Tei, K.; Imaki, J.; Miyata, Y.						
Biochem. Biophys. Res. Commun. 280, 733-737, 2001						
A;Title: Molecular cloning of SCDF-B, a novel growth factor homologous to SC						
A;Reference number: JC7591; MUID:21092670; PMID:11162582						
A;Contents: Fetal brain						
A;Accession: JC7592						
A;Molecule type: mRNA						
A;Residues: 1-370 <HAM>						
C;Cross-references: DDBJ:AB052170						
C;Genetics:						

RESULT 7

Platelet-derived growth factor chain A precursor - African clawed frog

C;Species: *Xenopus laevis* (African clawed frog)

C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 16-Jul-1999

A;Accession: S08220

R;Bejcek, B.E.; Li, D.Y.; Deuel, T.F.

Nucleic Acids Res. 18, 680, 1990

A;Title: Nucleotide sequence of a cDNA clone of *Xenopus* platelet-derived growth factor A

A;Reference number: S08220; MUID:90175018

A;Accession: S08220

A;Status: translation not shown

A;Molecule type: mRNA

A;Residues: 1-215 <BEJ>

A;Cross references: EMBL:X17545; PIDN:964973; PIDN:CAA35583.1; PID:964974

C;Superfamily: platelet-derived growth factor

C;Keywords: alternative splicing; growth factor

F:1-22/Domain: signal sequence #status predicted <STG>

F:23-91/Domain: propeptide #status predicted <PRO>

F:92-215/Product: platelet-derived growth factor chain A #status predicted <MAT>

Query Match 17.6% Score 105; DB 2; Length 215;

Best Local Similarity 31.4%; Pred. No. 0_0_0038;

Matches 33; Conservative 14; Mismatches 32; Indels 26; Gaps 8;

Qy 11 CTPRNFSVSI-REELKRTDTIF--WPGCLLVRGGNCACCLHNCNECQPSKTKYKH 67

Db 101 CKTRVIEIPRSQIDPTSANFLIWPCCVEVKRGTG--CC-NTSSVKQPSRI--HH 152

Qy 68 -----EVQLRPKTVGRLKSLTDVALEHHECDCVCRGST 104

Db 153 RSVKVAKVEYRKPK----LKEVL--VRLEEHLECTCTANSNS 190

RESULT 8

platelet derived growth factor A chain long form precursor - African clawed frog

C;Species: *Xenopus laevis* (African clawed frog)

C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999

A;Accession: I51550

R;Marcola, M.; Melton, D.A.; Stiles, C.D.

Science 241, 1223-1225, 1988

A;Title: Platelet-derived growth factor A chain is maternally encoded in *Xenopus* embryos

A;Reference number: I51550; MUID:88321676

A;Status: preliminary; translated from GB/EMBL/DDBJ

A;Molecule type: mRNA

A;Residues: 1-226 <MER>

A;Cross-references: GB:M23237; PIDN:9214648; PIDN:AAA49927.1; PID:9214649

C;Superfamily: platelet-derived growth factor

Query Match 17.6% Score 105; DB 2; Length 226;

Best Local Similarity 31.4%; Pred. No. 0_0039;

Matches 33; Conservative 14; Mismatches 32; Indels 26; Gaps 8;

Qy 11 CTPRNFSVSI-REELKRTDTIF--WPGCLLVRGGNCACCLHNCNECQPSKTKYKH 67

Db 101 CKTRVIEIPRSQIDPTSANFLIWPCCVEVKRGTG--CC-NTSSVKQPSRI--HH 152

Qy 68 -----EVQLRPKTVGRLKSLTDVALEHHECDCVCRGST 104

Db 153 RSVKVAKVEYRKPK----LKEVL--VRLEEHLECTCTANSNS 190

RESULT 9

PFHg2

Platelet-derived growth factor chain B precursor [validated] - human

N;Alternate names: PDGF-B-chain; PDGF-B; PDGF-II; PDGF-related transforming protein (sis

C;Species: *Homo sapiens* (man)

Mol. Cell. Biol. 8, 284-292, 1988 A;Title: The 5' untranslated sequence of the c-sis/platelet-derived growth factor 2 trans A;Reference number: 157635; MUID:38094398 A;Status: translated from GB/EMBL/DDBJ A;Molecule type: DNA A;Residues: 1-20 <R02> A;Cross-references: EMBL:X02744; PIDN:CAA26524.1; PID:930247 R;Author, L.; Josephs, S.F.; Jarrett, R.; Reitz, M.S. Nucleic Acids Res. 13, 5007-018, 1985 A;Title: Nucleotide sequence of transforming human c-sis cDNA clones with homology to pl A;Reference number: I37266; MUID:8526923 A;Accession: I37266 A;Status: translated from GB/EMBL/DDBJ A;Molecule type: mRNA A;Residues: 1-241 <RAT> A;Cross-references: EMBL:X00559; GB:X00560; GB:X00561; GB:X00562 R;Dirks, R.P.H.; Onnekink, C.; Jansen, H.J.; de Jong, A.; Bloemers, H.P.J. Nucleic Acids Res. 23, 3815-3822, 1995 A;Title: A novel human c-sis mRNA species is transcribed from a promoter in c-sis intron A;Reference number: S58382; MUID:95388493 A;Accession: S58383 A;Status: preliminary A;Molecule type: mRNA A;Residues: MFIMGL ¹ -22-200 <DIR> A;Cross-references: EMBL:X83105; PID:9951023; PIDN:CAA58679.1; PID:9951025 R;Cook, A.L.; Kirwan, P.M.; Craig, S.; Bawden, L.J.; Green, D.R.; Price, M.J.; Richardson, Biochem. 281, 57-65, 1992 A;Title: Purification and analysis of protease-resistant mutants of recombinant platelet-derived growth factor A;Reference number: I38108; MUID:9211792 A;Accession: I38108 A;Status: preliminary; translated from GB/EMBL/DDBJ A;Molecule type: mRNA A;Residues: M ¹ -82-241 <COO> A;Cross-references: EMBL:X63966; PID:9311378; PIDN:CAA45383.1; PID:935377 A;Note: mutagenized recombinant sequence C;Comment: Platelet-derived growth factor, a potent mitogen for cells of mesenchymal origin C;Genetics: A;Gene: GDB:PDGFB A;Cross-references: GDB:120709; OMIM:190040 A;Map position: 22q12.3-22q13.1 A;Introns: 57/3; 94/1; 192/3; 241/1 C;Complex: homodimer; heterodimer (see PIR:PFH011) C;Superfamily: Platelet-derived growth factor C;Keywords: growth factor; mitogen F;1-20/Domain: signal sequence #status predicted <SIG> F;21-81/Domain: amino-terminal propeptide #status predicted <PRO> F;82-190/Product: platelet-derived growth factor chain B #status experimental <MAT> F;159-167/Region: receptor binding #status predicted F;191-241/Domain: carboxyl-terminal propeptide #status predicted <CTP> F;97-141/130-178 134-180/Disulfide bonds: #status experimental F;124/Disulfide bonds: interchain (to 133 in homodimeric form) #status predicted F;133/Disulfide bonds: interchain (to 124 in homodimeric form) #status experimental F;133/Disulfide bonds: interchain (to chain A-124 in heterodimeric form) #status predicted	Qy 58 VPSKVTTRKYHEVQLRP---RTGVV---RGLHKSLTDVALEHHBECDC 98 Db 142 RPTQV-----QLPVQVRKIEIVRKPIFKKAT-VTLEDHLACKC 180
RESULT 10 TVCFSS platelet-derived growth factor chain B precursor - cat N;Alternate names: PDGF related transforming protein C;Species: Felis silvestris catus (domestic cat) C;Date: 30-Jun-1989 #sequence_revision 30-Jun-1989 #text_change 31-Mar-1996 C;Accession: A26402 R;Van den Ouveland, A.M.W.; Van Groningen, J.J.M.; Schalken, J.A.; Van Neck, H.W.; B Nucleic Acids Res. 15, 959-970, 1987 A;Title: Genetic organization of the c-sis transcription unit. A;Cross-references: EMBL:A26402; PID:87146463 A;Accession: A26402 A;Molecule type: mRNA A;Residues: 1-245 <VAN> C;Genetics: A;Gene: sis C;Superfamily: platelet-derived growth factor C;Keywords: glycoprotein; growth factor; platelet; proto-oncogene; transforming prot F;1-20/Domain: signal sequence #status predicted <SIG> F;21-81/Domain: propeptide #status predicted <PRO> F;82-194/Product: platelet-derived growth factor chain B #status predicted F;163-167/Region: receptor binding #status predicted F;63/Binding site: carbohydrate (Asn) (covalent) #status predicted	Qy 58 VPSKVTTRKYHEVQLRP---RTGVV---RGLHKSLTDVALEHHBECDC 98 Db 142 RPTQV-----QLPVQVRKIEIVRKPIFKKAT-VTLEDHLACKC 180
Query Match 17.6%; Score 105; DB 1; Length 245; Best Local Similarity 33.0%; Pred. No. 0.0042; Matches 35; Conservative 13; Mismatches 36; Indels 22; Gaps 8;	Query Match 17.6%; Score 105; DB 1; Length 245; Best Local Similarity 33.0%; Pred. No. 0.0042; Matches 35; Conservative 13; Mismatches 36; Indels 22; Gaps 8;
Qy 2 LTEEVRLYSCTPRN--FSVSIRESPLKRIDTIF--WPGCLLVKRCGGNCACCLHNHCNEQC 57 Db 92 VAEPMIAECKTRTEVEFEVS-RRLLDNNFLWPPCVCVQRCSG--CC--NNRNVQC 145	Qy 2 LTEEVRLYSCTPRN--FSVSIRESPLKRIDTIF--WPGCLLVKRCGGNCACCLHNHCNEQC 57 Db 92 VAEPMIAECKTRTEVEFEVS-RRLLDNNFLWPPCVCVQRCSG--CC--NNRNVQC 145
Query Match 17.6%; Score 105; DB 1; Length 245; Best Local Similarity 33.0%; Pred. No. 0.0042; Matches 35; Conservative 13; Mismatches 36; Indels 22; Gaps 8;	Query Match 17.6%; Score 105; DB 1; Length 245; Best Local Similarity 33.0%; Pred. No. 0.0042; Matches 35; Conservative 13; Mismatches 36; Indels 22; Gaps 8;
Qy 58 VPSKVTTRKYHEVQLRP---RTGVV---RGLHKSLTDVALEHHBECDC 98 Db 146 RPTQV-----QLPVQVRKIEIVRKPIFKKAT-VTLEDHLACKC 184	Qy 58 VPSKVTTRKYHEVQLRP---RTGVV---RGLHKSLTDVALEHHBECDC 98 Db 146 RPTQV-----QLPVQVRKIEIVRKPIFKKAT-VTLEDHLACKC 184
RESULT 11 A41551 vascular endothelial growth factor 206 precursor - human N;Alternate names: vascular permeability factor N;Contains: vascular endothelial growth factor 121 (VEGF 121); VEGF 165; VEGF 189; VE C;Species: Homo sapiens (man) C;Date: 28-Aug-1992 #sequence_revision 28-Aug-1992 #text_change 05-Nov-1999 C;Accession: A41551; C41551; C41551; A40454; B40454; A40454; A40080; A40080; JQ1463; R;Rouck, K.A.; Ferrara, N.; Winer, J.; Cachianes, G.; Li, B.; Leung, D.W. Mol. Endocrinol. 5, 1806-1814, 1991 A;Title: The vascular endothelial growth factor family: identification of a fourth mo A;Reference number: A41551; MUID:92168017 A;Accession: A41551 A;Molecule type: mRNA A;Residues: 1-140, N ¹ -183-232 <HO02> A;Status: nucleic acid sequence not shown; not compared with conceptual translation A;Cross-references: GB:S85192; PID:9246155; PID:9246156 A;Accession: C41551 A;Status: nucleic acid sequence not shown A;Molecule type: mRNA A;Residues: 1-140, N ¹ -183-232 <HO02> A;Status: nucleic acid sequence not shown; not compared with conceptual translation A;Cross-references: GB:S85192; PID:9246155; PID:9246156 A;Accession: C41551 A;Status: nucleic acid sequence not shown A;Molecule type: mRNA A;Residues: 1-140, N ¹ -183-232 <HO02> A;Status: nucleic acid sequence not shown; not compared with conceptual translation A;Cross-references: GB:S85192; PID:9246155; PID:9246156 A;Accession: C41551 A;Status: nucleic acid sequence not shown A;Molecule type: mRNA A;Residues: 1-140, N ¹ -183-232 <HO02> A;Status: nucleic acid sequence not shown; not compared with conceptual translation A;Cross-references: GB:S85192; PID:9246155; PID:9246156 A;Accession: C41551 A;Status: nucleic acid sequence not shown A;Molecule type: mRNA A;Residues: 1-140, N ¹ -183-232 <HO02> A;Status: nucleic acid sequence not shown; not compared with conceptual translation A;Cross-references: GB:S85192; PID:9246155; PID:9246156 A;Accession: C41551 A;Status: nucleic acid sequence not shown A;Molecule type: mRNA A;Residues: 1-140, N ¹ -183-232 <HO02>	Query Match 17.6%; Score 105; DB 1; Length 241; Best Local Similarity 33.3%; Pred. No. 0.0042; Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;
Qy 2 LTEEVRLYSCTPRN--FSVSIRESPLKRIDTIF--WPGCLLVKRCGGNCACCLHNHCNEQC 57 Db 88 VAEPMIAECKTRTEVEFEVS-RRLLDNNFLWPPCVCVQRCSG--CC--NNRNVQC 141	Qy 2 LTEEVRLYSCTPRN--FSVSIRESPLKRIDTIF--WPGCLLVKRCGGNCACCLHNHCNEQC 57 Db 88 VAEPMIAECKTRTEVEFEVS-RRLLDNNFLWPPCVCVQRCSG--CC--NNRNVQC 141

A; Molecule type: DNA
 A; Residues: 1-165,183-232 <T1>
 A; Cross-references: GB: M63971; GB: M63973; GB: M63975; GB: M63976; GE
 A; Accession: BA0454
 A; Molecule type: DNA
 A; Residues: 1-140, 'N',183-232 <T1>
 A; Cross-references: GB: M63971; GB: M63972; GB: M63973; GB: M63974; GB: M63975; GB: M63976; GE
 A; Accession: C40454
 A; Molecule type: DNA
 A; Residues: 1-141,227-232 <T1>
 A; Cross-references: GB: M63971; GB: M63972; GB: M63973; GB: M63975; GB: M63978
 R; Leung, D.W.; Cachlanes, G.; Kuang, W.J.; Goeddel, D.V.; Ferrara, N.
 A; Title: Vascular endothelial growth factor is a secreted angiogenic mitogen.
 A; Reference number: A40080; MUID: 90069668
 A; Accession: A40080
 A; Status: not compared with conceptual translation
 A; Molecule type: mRNA
 A; Residues: 1-140, 'N',183-232 <LEU>
 A; Cross-references: GB: M27281; NID: 9340300; PIDN: AAA36807_1; PID: g340301
 R; Weindel, K.; Marme, D.; Weich, H.A.
 B; Title: Vascular endothelial growth factor is a secreted angiogenic mitogen.
 A; Reference number: A40080; MUID: 90069668
 A; Accession: A40080
 A; Status: not compared with conceptual translation
 A; Molecule type: mRNA
 A; Residues: 1-140, 'N',183-232 <LEU>
 A; Cross-references: GB: M22977; NID: 9181970; PIDN: AAA35789_1; PID: g181971
 R; Biotech. Biophys. Res. Commun. 183, 1167-1174, 1992
 B; Title: AIDS-associated Kaposi's sarcoma cells in culture express vascular endothelial
 A; Reference number: JQ1463; MUID: 92231879
 A; Accession: JQ1463
 A; Molecule type: mRNA
 A; Residues: 1-140, 'N',183-232 <WE2>
 A; Experimental source: AIDS-Kaposi's sarcoma cell
 R; Connolly, D.T.; Olander, J.V.; Heuvelman, D.; Nelson, R.; Siegel, N.; Hay
 J. Biol. Chem. 264, 20017-20024, 1989
 A; Title: Human vascular permeability factor. Isolation from U937 cells.
 A; Reference number: A34492; MUID: 90062112
 A; Accession: A34492
 A; Molecule type: protein
 A; Residues: 27-36; 43-49, R'; 72-76, '0', 78-81; 59-71 <CON>
 C; Comment: The most common of several alternatively spliced forms is VEGF 165.
 C; Genetics:
 A; Gene: Gdp; VEGF
 A; Cross-references: GDB: 132244; OMIM: 192240
 A; Map position: 6p21.6p12
 C; Function: promotes fluid and protein leakage from blood vessels
 C; Keywords: alternative splicing; angiogenesis; dimer; disulfide bond; extracellular pro
 F; 1-232/Product: vascular endothelial growth factor 206 precursor #status predicted <V20
 F; 1-165,183-232/Product: vascular endothelial growth factor 189 precursor #status Predict
 F; 1-141,227-232/Product: vascular endothelial growth factor 121 precursor #status Predict
 F; 1-26/Domain: signal sequence #status predicted <SIG>
 F; 101/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 17.5%; Score 104.5; DB 2; Length 232;
 Best Local Similarity 27.0%; Pred. No. 0 0045; Indels 21; Gaps 4;
 Matches 24; Conservative 21; Mismatches 33; Indels 11; Gaps 4;

Db 107 MRIKPHQG----QHIGEMSFLOHNKEC 130
 RESULT 12
 B28964 platelet-derived growth factor chain A precursor splice form 2 - human
 C; Species: Homo sapiens (man)
 C; Date: 30-Jun-1989 #sequence_revision 30-Jun-1989 #text_change 16-Jul-1999
 C; Accession: B28964; GB: M21571; GB: J03638; GB: M19985; GB: M19986; GB: M19987;
 R; Bonthron, D.; Collins, T.; Grzeschik, K.H.; van Roy, N.; Speleman, F.
 Genomics 13, 257-263, 1992
 A; Title: platelet-derived growth factor A chain: confirmation of localization of PDGF
 A; Reference number: A42002; MUID: 92307656
 A; Accession: B42002
 A; Status: preliminary; not compared with conceptual translation
 A; Molecule type: DNA
 A; Residues: 152-196 <BO2>
 R; Rorsman, P.; Bywater, M.; Knott, T.J.; Betsholtz, C.
 Mol. Cell. Biol. 8, 571-577, 1988
 A; Title: Structural characterization of the human platelet-derived growth factor A-ch
 A; Reference number: A28122; MUID: 88174638
 A; Molecule type: mRNA
 A; Residues: 1-63, 'TRD', 67-196 <ROR>
 A; Cross-references: GB: M20488
 A; Note: the authors translated the codon ACA for residue 64 as Arg, CGT for residue 6
 C; Comment: Exon 6 is spliced out of this variant splice form. For the major splice fo
 C; Genetics:
 A; Gene: GDB: PDGFA
 A; Cross-references: GDB: 120266; OMIM: 173430
 A; Map type: TRD
 C; Superfamily: platelet-derived growth factor
 C; Keywords: alternative splicing; glycoprotein; growth factor; mitogen; platelet
 Query Match 17.4%; Score 104; DB 2; Length 196;
 Best Local Similarity 34.0%; Pred. No. 0 0044; Indels 16; Gaps 6;
 Matches 32; Conservative 12; Mismatches 34;
 Db 96 CKTRPVYIPLPRSQVDPTSANFLINPPCVEVKRCTG---CC--NTSSVKCOPSRVYHRSV 150
 Query Match 11 CTPRNFSVSI-REELKRDTIF--WPGCLLYKRCGGNCACCLHNCQCVPSKV--TK 64
 Db 65 KYHEYLQLRPKTGVRLHKSLTDVALEHHECDC 98
 Query Match 11 CKTRPVYIPLPRSQVDPTSANFLINPPCVEVKRCTG---CC--NTSSVKCOPSRVYHRSV 150
 Db 151 KVAKVEYVRKKPKLKEV----QVRLEHLECAC 179
 RESULT 13
 S25096 platelet-derived growth factor chain A precursor - rat (fragment)
 C; Species: Rattus norvegicus (Norway rat)
 C; Date: 07-Apr-1994 #sequence_revision 07-Apr-1994 #text_change 16-Jul-1999
 C; Accession: S25096; S33764
 A; Description: Cross-species conservation in sequence and function of PDGF ligands an
 R; Herren, B.; Weyer, K.A.; Loetscher, P.; Pech, M.
 submitted to the EMBL Data Library, July 1992
 A; Cross-references: EMBL: 214120; NID: 956865; PIDN: CAA70490.1; PID: 956866
 R; Herren, B.; Weyer, K.A.; Rouge, M.; Loetscher, P.; Pech, M.
 Biochim. Biophys. Acta 1173, 294-302, 1993

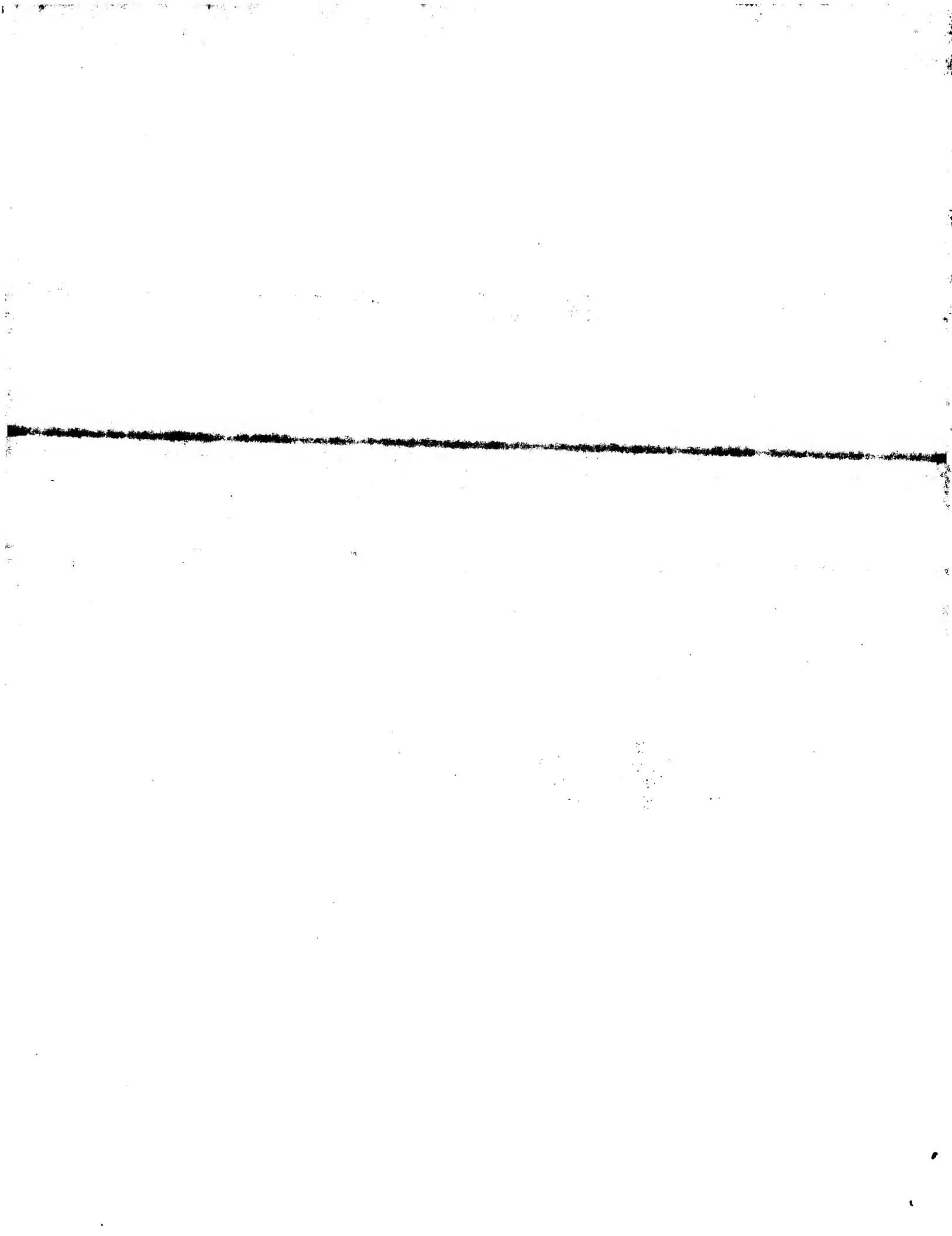
Query Match 17.5%; Score 104.5; DB 2; Length 232;
 Best Local Similarity 27.0%; Pred. No. 0 0045; Indels 21; Gaps 4;
 Matches 24; Conservative 21; Mismatches 33; Indels 11; Gaps 4;

Db 11 CTPRNFSVSI-FEEL-KRTDTFWPGCLLYKRCGGNCACCLHNCQCVPSKVTKKYHEV 69
 Db 52 CHPTEFLVDFQEYDEIEFKPSPVLMRCGG--CC--NDEGLEYCVPTEESNITMQI 106
 Query Match 17.5%; Score 104.5; DB 2; Length 232;
 Best Local Similarity 27.0%; Pred. No. 0 0045; Indels 21; Gaps 4;

Db 70 LQLRPKTGVRLHKSLTDVALEHHECDC 98

Db 127 RPTQV-----QLRPVQRKIEIVRKPPFKAT-VTLEDHLACKC 165

Search completed: May 24, 2002, 09:59:01
Job time: 145 sec



Result No.	Score	Query	Match	Length	DB	ID	Description
1	117.5	19.7	326	1	VEGD_RAT	035251	rattus norv
2	115.5	19.3	358	1	VEGD_MOUSE	P97946	mus musculu
3	114.5	19.2	148	1	VEGH_ORFN7	P52585	orf virus (
4	111.5	18.7	354	1	VEGD_HUMAN	Q43915	homo sapien
5	108.5	18.2	164	1	VEGA_CAVPO	P26617	cavia porce
6	108	18.1	213	1	PDGA_RABIT	P34007	oryctolagus
7	105	17.6	207	1	VEGB_HUMAN	P49765	homo sapien
8	105	17.6	226	1	PDGA_XENLA	P13698	xenopus lae
9	105	17.6	241	1	PDGB_HUMAN	P01127	homo sapien
10	105	17.6	245	1	PDGB_FELCA	P12919	felis silve
11	104.5	17.5	232	1	VEGA_HUMAN	P15692	homo sapien
12	104	17.4	204	1	PDGA_RAT	P28576	rattus norv
13	104	17.4	211	1	PDGA_HUMAN	P04085	homo sapien
14	104	17.4	211	1	PDGA_MOUSE	P20033	mus musculu
15	104	17.4	226	1	TSIS_SMSAV	P01128	simian sarc
16	102.5	17.2	133	1	VEGH_ORFN2	P52584	orf virus (
17	102.5	17.2	190	1	VEGA_PIG	P49151	sus scrofa
18	102.5	17.2	214	1	VEGA_CANFA	Q9my3	cavia porce
19	102	17.1	207	1	VEGB_BOVIN	Q9xs49	bos taurus
20	101.5	17.0	146	1	VEGA_SHEEP	P50412	ovis aries
21	101.5	17.0	190	1	VEGA_BOVIN	P15691	bos taurus
22	100.5	16.8	419	1	VEGC_HUMAN	P49767	homo sapien
23	99.5	16.7	415	1	VEGC_MOUSE	P97953	mus musculu
24	97.5	16.3	190	1	VEGA_HORSE	Q9gk0	equus cabal
25	97	16.2	207	1	VEGB_MOUSE	P49766	mus musculu
26	96.5	16.2	214	1	VEGA RAT	P16612	rattus norv
27	95.5	16.0	190	1	VEGA_MESAU	Q99ps1	mesocricetus auratus
28	95.5	16.0	214	1	VEGA_MOUSE	P00731	mus musculu
29	94	15.7	135	1	VEGB RAT	P35485	rattus norv
30	94	15.7	225	1	PDGB RAT	P05028	rattus norv
31	94	15.7	241	1	PDGB MOUSE	P31240	mus musculu
32	88.5	14.8	216	1	VEGA CHICK	P52582	gallus gallus
33	87	14.6	141	1	PDGB SHEEP	Q9i259	ovis aries

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 105224 seqs, 38719550 residues

Total number of hits satisfying chosen parameters: 105224

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt_40:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

RESULT 1
VEGD_RAT STANDARD; PRT; 326 AA.
ID VEGD_RAT
AC Q35251;
DT 01-MAR-2002 (Rel. 41, Created)
DT 01-MAR-2002 (Rel. 41, Last sequence update)
DT 01-MAR-2002 (Rel. 41, Last annotation update)
DE Vascular endothelial growth factor D precursor (VEGF-D) (c-fos induced growth factor) (FIGF)
GN FIGF OR VEGFD
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TAXID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN-Sprague-Dawley;
RA Yamada Y., Hirata Y., Nezu J., Shimane M.;
RL Submitted (JUL-1997) to the EMBL/GenBank/DDBJ databases.
-I- FUNCTION: Growth factor active in angiogenesis, lymphangiogenesis and endothelial cell growth, stimulating their proliferation and migration and also has effects on the permeability of blood vessels. May function in the formation of the venous and lymphatic vascular systems during embryogenesis, and also in the maintenance of differentiated lymphatic endothelium in adults. Binds and activates VEGFR-3 (Flt4) receptor (By similarity).
-I- SUBUNIT: Homodimer; (By similarity).
-I- SUBCELLULAR LOCATION: Secreted (By similarity).
-I- PTM: Undergoes a complex proteolytic maturation which generates a variety of processed secreted forms with increased activity toward VEGFR-3 and VEGFR-2. VEGF-D first forms an antiparallel homodimer linked by disulfide bonds before secretion. The fully processed VEGF-D is composed mostly of two VEGF homology domains (VHDs) bound by non-covalent interactions (By similarity).
-I- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.
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EMBL: AF014827; AAB66557.1; -
HSSP: P15692; 1VPP.
InterPro: IPR00072; PDGF.
Pfam: PF00341; PDGF; 1.
ProDom: PDD01629; PDGF; 1.
DR SM0011; PDGF; 1.
PROSITE: PS00249; PDGF; 1.
PROSITE: PS50278; PDGF; 2; 1.
Mitogen; Growth factor; Glycoprotein; Signaling; Receptor.
KW Cleavage on pair of basic residues; Multigene family.
FT SIGNAL 1
PROPEP 22 93
FT PENTHAL 21
FT PORENTIAL 22
FT PROPEP 22

CHAIN	94	210	VASCULAR ENDOTHELIAL GROWTH FACTOR D.
PROPEP	211	326	POTENTIAL.
DOMAIN	227	317	4 X 16 AA REPEATS OF C-X(10)-C-X-C-
			X(1,3)-C.
REPEAT	227	242	1 (APPROXIMATE).
REPEAT	263	278	2.
REPEAT	282	298	3.
REPEAT	306	317	4 (INCOMPLETE).
DISULFID	116	158	INTRACHAIN (BY SIMILARITY).
DISULFID	147	194	INTRACHAIN (BY SIMILARITY).
DISULFID	151	196	INTRACHAIN (BY SIMILARITY).
DISULFID	141	141	INTERCHAIN (BY SIMILARITY).
DISULFID	150	150	INTERCHAIN (BY SIMILARITY).
CARBOHYD	160	160	N-LINKED (GLCNAC -) (POTENTIAL).
CARBOHYD	190	190	N-LINKED (GLCNAC -) (POTENTIAL).
CARBOHYD	292	292	N-LINKED (GLCNAC -) (POTENTIAL).
SEQUENCE	326 AA	37112 MW:	12611ATA3713996C00 C964.

```

Query Match      19.7%   Score 117.5; DB 1; Length 326;
Best Local Similarity    33.0%; Pred. No. 2.8e-05;
Matches 35; Conservative 15; Mismatches 41; Indels 15; Gaps 6;
Gaps 6;

1 LLTEEVRLYKCTPRNEVSIREEL-KRTDTFWPGCLLVLKRCGGNCACLLHNQNECQCY - 58
  :: || : || : || : || : || : || : || : || : || : || : || : || : || : |
106 VIDEWQRTQCSPRETCVEASELGLTTNTFFKPPCVNFRGG--CC--NEESVMCMN 160

59 --PSKVTKYHEVQLQLRKPKGVRGLHKSLTDALEHHEECDPCVCRG 102
  | : || : || : || : || : || : || : || : || : || : || : |
161 TSTSVISKQDFEISV--PLSV--PELVPKIANHTGCKLPTG 200

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SUITE	2	VEGF MOUSE	STANDARD;	PRT;	358 AA.
		P97946;			
		01-MAR-2012 (Rel. 41, Created)			
		01-MAR-2002 (Rel. 41, Last sequence update)			
		01-MAR-2002 (Rel. 41, Last annotation update)			
		Vascular endothelial growth factor D precursor (VEGF-D) (c-fos induced growth factor) (FIGF).			
		FIGF OR VEGFD.			
		Mus musculus (Mouse).			
		Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.			
		NCBI_TaxID:10090;			

SEQUENCE FROM N.A.
STRAIN=57BL/6J; TISSUE=Fibroblast;
MEDLINE=97/030254; PubMed=8876195;
Orlandini M., Marconcini L., Ferruzzi R., Oliviero S.;
"Identification of a c-fos induced gene that is related to the
platelet derived growth factor/vascular endothelial growth factor
family";
Proc. Natl. Acad. Sci. U.S.A. 93:11675-11680 (1996)

Mech.: Dev.: /3:221-224
[4]
RECEPTOR SPECIFICITY:

Query Match Score 115.5; DB 1; Length 358;
Best Local Similarity 33.0%; Pred. No. 4; ge-05;

Matches	35;	Conservative	15;	Mismatches	41;	Indels	15;	Gaps	6;		
Qy	1 LLETEVRLLCTPRNFSVSIReEL-KRTDTFWPGCLLVKRCGGNCACCLHCNCNEQQCV-										
Db	106 VIDEENORTOOSPRETCVEASELGTNTNFPEKPPCYNVPRCGG---CC--NEEGVMCMN 160										
Qy	59 -PSKVTKKHEVLQLRPTKTVLGLKSLTVALEHHEECVCVRG 102										
Db	161 TTSYLSKQLEISV--PLTSV---PELVVKIANHTGCKCLPFG 200										
RESULT 3											
VEGF_ORFENT	ID	P52585;	STANDARD;	PRT;	148 AA.						
AC	AC_01-OCT-1996 (Rel. 34, Created)										
DT	DT_01-OCT-1996 (Rel. 34, Last sequence update)										
CC	CC_16-OCT-2001 (Rel. 40, Last annotation update)										
DR	DR_A2R.	Vascular endothelial growth factor homolog precursor.									
OS	OS_Orf virus (strain NZ7) (OV NZ-7).										
OC	OC_dssDNA viruses, no RNA stage; Poxviridae; Chordopoxvirinae;										
OX	OX_Parapoxvirus.										
RN	RN_NCBI_TAXID=73495;										
RP	RP_SEQUENCE FROM N.A.										
RX	RX_MEDLINE=94076465; PubMed=8254780;										
RA	RA_Lytte D.J., Fraser K.M., Fleming S.B., Mercer A.A., Robinson A.J.;										
RT	RT_Homologs of vascular endothelial growth factor are encoded by the poxviruses of virus."										
RL	RL_Virology. 68:84-92(1994).										
CC	CC_!- FUNCTION: INDUCES ENDOTHELIAL PROLIFERATION.										
CC	CC_!- SUBUNIT: HOMODIMER; DISULFIDE-LINKED (BY SIMILARITY).										
CC	CC_!- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.										
CC	CC_This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/ or send an email to license@isb-sib.ch).										
CC	CC_EMBL; S67522; AB29223.1;										
DR	DR_HSSP; P15692; 20PF.										
DR	DR_InterPro; IPR00072; PDGF.										
DR	DR_Pfam; PF00341; PDGF; 1.										
DR	DR_ProDom; PDO01629; PDGF; 1.										
DR	DR_SM00141; PDGF; 1.										
DR	DR_PROSITE; PS00249; PDGF; 1.										
DR	DR_PROSITE; PS50278; PDGF_2; 1.										
KW	KW_Mitogen; Growth factor; Glycoprotein; Signal.										
FT	FT_SIGNAL 1 25 POTENTIAL.										
FT	FT_CHAIN 26 148 VASCULAR ENDOTHELIAL GROWTH FACTOR										
FT	FT_DISULFID 46 88 BY SIMILARITY.										
FT	FT_DISULFID 77 130 BY SIMILARITY.										
FT	FT_DISULFID 81 132 BY SIMILARITY.										
FT	FT_DISULFID 71 71 INTERCHAIN (BY SIMILARITY).										
FT	FT_DISULFID 80 80 INTERCHAIN (BY SIMILARITY).										
FT	FT_CARBONID 95 95 N-LINKED (GLCNAC . . .) (POTENTIAL).										
SQ	SQ_SEQUENCE 148 AA; 16078 MW; FOE13BA104CC738 CRC64;										
Query Match	19.2%	Score 114.5; DB 1; Length 148;									
Best Local Similarity	30.2%	Pred. No. 2.7e-05;									
Matches	29;	Conservative 19; Mismatches 43; Indels 5; Gaps 3;									
Qy	11 CTPRNFSVSIReEL-KRTDTFWPGCLLVKRCGGNCACCLHCNCNEQQCV-										
Db	46 CKPRDITVYLCSEXPSTNUQNPVCYVTKRCSG---CCNDGQ1CTAVERTNTTVVSV 102										
Qy	70 LQLRPTKGVR-GLKHSLTDVLEHHBECDCVCRGST 104										

Query Match Similarity 19.2%; Score 114.5; DB 1; Length 148;
 Best Local Similarity 30.2%; Pred. No. 2.7e-05;
 Matches 29; Conservative 19; Mismatches 43; Indels 5; Gaps 3;

RESULT 4
 VEGF_HUMAN STANDARD; PRT; 354 AA.
 ID VEGD_HUMAN STANDARD; PRT; 354 AA.
 AC 043915; DT 01-MAR-2002 (Rel. 41, Created)
 AC 043915; DT 01-MAR-2002 (Rel. 41, Last sequence update)
 AC 043915; DT 01-MAR-2002 (Rel. 41, Last annotation update)
 DE Vascular endothelial growth factor D precursor (VEGF-D) (c-fos induced growth factor) (FIGF).
 DE FIGF OR VEGFD.
 OS Homo sapiens (Human).
 OC Bokaryota; Metazoa; Chordata; Craniata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homino. [1]
 OC Mammalia; Eutheria; Primates; Catarrhini; Homino. [1]
 RN 92051128; PubMed=92051128;
 RA Yamada Y., Nezu J.-I., Shimane M., Hirata Y.; RT Molecular cloning of a novel vascular endothelial growth factor, VEGF-D.; RL Genomics 42:483-488(1997). [2]
 RN 97349118; PubMed=97349118;
 RA Aitai K., Ballabio A., Zuffardi O., Oliviero S.; RT Human FIGF cloning, gene structure, and mapping to chromosome Xp22.1 between the PIGA and the GRPR genes.; RL Genomics 47:207-216(1998). [3]
 RN PROCESSING, AND SEQUENCE FROM N.A.
 RC TISSUE-Lung; SEQUENCE FROM N.A.
 RX MEDLINE=981118549; PubMed=94352229;
 RA Achien M.G., Jeltesch M., Kukk E., Maekinen T., Vitali A., Wilks A.F., RT "Vascular endothelial growth factor D (VEGF-D) is a ligand for the tyrosine kinases VEGF receptor 2 (Flk1) and VEGF receptor 3 (Flt4)."; RL Proc. Natl. Acad. Sci. U.S.A. 95:548-553(1998). [4]
 RN 20011413; PubMed=10542248;
 RA Stacker S.A., Stevens K.L., Caesar C., Vitali A., Domagala T., RA Nice E.C., Roufaill S., Simpson R.J., Moritz R., Karpanen T., RA Aitai K., Stacker S.A., Roufaill S., Simpson R.J., Moritz R., Karpanen T., RT Biosynthesis of vascular endothelial growth factor D involves proteolytic processing which generates non-covalent homodimers.; RL J. Biol. Chem. 274:32127-32136(1999).
 CC 1- FUNCTION: Growth factor active in angiogenesis, lymphangiogenesis and endothelial cell growth, stimulating their proliferation and migration and also has effects on the permeability of blood vessels. May function in the formation of the venous and lymphatic vascular systems during embryogenesis, and also in the maintenance of differentiated lymphatic endothelium in adults. Binds and activates VEGFR-2 (Flk1) and VEGFR-3 (Flt4) receptors.
 CC 1- SUBUNIT: Homodimer; non-covalent and antiparallel.
 CC 1- SUBCELLULAR LOCATION: Secreted.
 CC 1- TISSUE SPECIFICITY: Highly expressed in lung, heart, small intestine and fetal lung, and at lower levels in skeletal muscle, colon, and pancreas.
 CC 1- PM: Undergoes a complex proteolytic maturation which generates a variety of processed secreted forms with increased activity toward VEGFR-3 and VEGFR-2. VEGF-D first form an antiparallel homodimer linked by disulfide bonds before secretion. The fully processed VEGF-D is composed mostly of two VEGF homology domains (VHDs) bound by non-covalent interactions.
 CC 1- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.

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Mammalia; Eutheria; Rodentia; Hystricognathi; Caviidae; Cavia.
NCBI_TaxID=10141;

OC	Mammalia; Eutheria; Rodentia; Hystricognathi; Caviidae; Cavia.
OX	NCBI_TAXID=10141;
RN	[1]
RP	SEQUENCE FROM N.A.
RC	TISSUE=Bile duct;
RA	Berse B.;
RL	Submitted (JAN-1992) to the EMBL/GenBank/DDBJ databases.
CC	-!- FUNCTION: Growth factor active in angiogenesis, and endothelial cell growth. Induces endothelial proliferation and vascular permeability (By similarity).
CC	-!- SUBUNIT: Homodimer; disulfide-linked. Also found as heterodimer with PGF (By similarity).
CC	-!- SUBCELLULAR LOCATION: Secreted but remains associated to cells or to the extracellular matrix unless released by heparin (By similarity).
CC	-!- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.
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CC	EMBL: M84230; AAA37057.1; -.
DR	DR HSSP; P15592; 1VGH.
DR	InterPro; IPR00072; PDGF.
DR	Pfam; PF00341; PDGF; 1.
DR	PFDBOM; PD001629; PDGF; 1.
DR	SMART; SM00111; PDGF; 1.
DR	PROSITE; PS00249; PDGF; 1.
DR	PROSITE; PS50278; PDGF; 2.
KW	Mitogen; Angiogenesis; Growth factor; Glycoprotein.
FT	DISULFID 25 67 BY SIMILARITY.
FT	DISULFID 56 101 BY SIMILARITY.
FT	DISULFID 60 103 BY SIMILARITY.
FT	DISULFID 50 50 INTERCHAIN (BY SIMILARITY).
FT	DISULFID 59 59 INTERCHAIN (BY SIMILARITY).
FT	CARBONYD 74 74 N-LINKED (GLCNAC. . .) (POTENTIAL).
SQ	SEQUENCE 164 AA; 193:30 MW; 9EBB86A81A905DCAA CRC34;
Query	EEVRLYS-----CTPARNFSVSTREEL-KRTDTIFWPGCLLKKRKGCGNCACLLHNCBCQ
Match	Best Local Similarity 18.28; Score 108.5; DB 1; Length 164;
Matches	26.58; Pred. No. 0.00013; Mismatches 21; Indels 17; Gaps 3;
Qy	4 EEVRLYS-----CTPARNFSVSTREEL-KRTDTIFWPGCLLKKRKGCGNCACLLHNCBCQ 56
Db	12 EEEVKFMDDYKRSRCPLEMVLVDIFQEYDEIYFKSCVPLMRCGG---CC--NDDSL 66
Qy	57 CVPKSXVTKYHEVQLRIRKTGYRGLHKSLTDVALEHHBECDC 98
Db	67 CVPTEEFNITQIMRIKHQG----QHIGEMSFQLQHSKCEC 103
RESULT	6
PDGA_RABBIT	STANDARD;
ID	PDGA_RABBIT
AC	P34077;
DT	01-FEB-1994 (Rel. 28, Created)
DT	01-FEB-1994 (Rel. 28, Last sequence update)
DT	01-MAR-2002 (Rel. 41, Last annotation update)
DE	Platelet-derived growth factor, A chain precursor (PDGF A-chain)
DE	(PDGF-1).
GN	Oryctolagus cuniculus (Rabbit).
OS	Oryctolagus cuniculus (Rabbit).
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC	Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
OX	NCBI_TAXID=9986;
RN	[1]
RP	SEQUENCE FROM N.A.
RC	Tissue=vascular smooth muscle;

KW	Mitogen; Growth factor; Glycoprotein; Signal; Heparin-binding;
KW	Alternative splicing; Multigene family.
FT SIGNAL	1 21 VASCULAR ENDOTHELIAL GROWTH FACTOR B. POTENTIAL.
FT CHAIN	22 207
FT DISULFID	4 7 89 BY SIMILARITY.
FT DISULFID	7 8 122 BY SIMILARITY.
FT DISULFID	82 124 BY SIMILARITY.
FT DISULFID	72 72 INTERCHAIN (BY SIMILARITY).
FT DISULFID	81 81 INTERCHAIN (BY SIMILARITY).
FT VARSPLIC	137 188 RAATPHRPOPSSVPQGDSAPAPSADITHPTPACPSAH SPRLPCPRTOHQRDPRTCRKLR (IN ISOFORM RSRSFLRCGRGLNPDTCRCKLR (IN ISOFORM AAPSPLSALTP -> PT)
FT VARSPLIC	189 207 MISSING (IN ISOFORM VEGF-B167). VEGF-B167).
FT SQ SEQUENCE	207 AA; 21602 MW; EDEAB1C0DFADEBC CRC64;
Query Match	Score 105; DB 1; Length 207;
Best Local Similarity	30.0%
Matches	Pred. No. 0.00037;
27; Conservative	Mismatches 34; Indels 12; Gaps 4;
Qy	10 SCTPRNFVSYFREELKRT-DTIVFWPQLLYKRCGGNCACCLHNCNECQCPSKVTKKYHE 68
Db	46 TCQPQREVVPVQIPELNGTVAQLPVSPCVTVQRCGG--CCPD--DQELEYPTQHQVRMQ 100
Qy	69 VLQLRPKTGVRLHKSLTDVALEHHBECDC 98
Db	101 ILMIRYPS-----SOLGENESEHSQSEC 124
RESULT 8	
ID PDGA_XENLA	STANDARD; PRT; 226 AA.
AC P13698;	
DT 01-JAN-1990	(Rel. 13, Created)
DT 01-JAN-1990	(Rel. 13, Last sequence update)
DT 01-MAR-2002	(Rel. 41, Last annotation update)
DE Platelet-derived growth factor, A chain precursor (PDGF A-chain)	
DE (PDGFA).	
OS Xenopus laevis (African clawed frog)	
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi	
OC Amphibia; Batrachia; Anura; Mesobatrachia; Pipidae; Pipidae;	
OC Xenopodinae; Xenopus.	
OX NCBI_TaxID=8355;	
RN [1]	SEQUENCE FROM N.A.
RP TISSUE=Oocyte;	
RX MEDLINE=90175018; PubMed=2308861;	
RA Bejcek P.E., Li D.Y., Dezel T.F.;	
RT "Nucleotide sequence of a cDNA clone of xenopus platelet-derived growth factor A chain";	
RL Nucleic Acids Res. 18:680-680(1990).	
RX MEDLINE=8821676; PubMed=3413486;	
RA Mercola M., Melton D.A., Stiles C.D.;	
RT "Platelet-derived growth factor A chain is maternally encoded in Xenopus embryos";	
RT Science 241:1223-1223(1998).	
RN [2]	SEQUENCE FROM N.A.
RP TISSUE=Oocyte;	
RX MEDLINE=90175018; PubMed=2308861;	
RA Bejcek P.E., Li D.Y., Dezel T.F.;	
RT "Nucleotide sequence of a cDNA clone of xenopus platelet-derived growth factor A chain";	
RL Nucleic Acids Res. 18:680-680(1990).	
CC FUNCTION: PLATELET-DERIVED GROWTH FACTOR IS A POTENT MITOGEN FOR CELLS OF MESENCHYMAL ORIGIN. BINDING OF THIS GROWTH FACTOR TO ITS AFFINITY RECEPTOR ELICITS A VARIETY OF CELLULAR RESPONSES. IT IS RELEASED BY PLATELETS UPON WOUNDING AND PLAYS AN IMPORTANT ROLE IN STIMULATING ADJACENT CELLS TO GROW AND THEREBY HEAL THE WOUND.	
CC -1- SUBUNIT: ANTI PARALLEL DISULFIDE LINKED DIMER OF NON IDENTICAL (A AND B) CHAINS. HOMODIMERS OF A AND B CHAINS ARE IMPLICATED IN TRANSFORMATION PROCESSES.	
CC -1- ALTERNATIVE PRODUCTS: 2 isoforms; a long form (shown here) and a short form; are produced by alternative splicing.	
CC -1- DOMAIN: The long form contains a basic insert which acts as a cell retention signal.	
CC -1- MISCELLANEOUS: A-A AND B-B, AS WELL AS A-B, DIMERS CAN BIND TO THE	
CC PDGF RECEPTOR, BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.	
CC -1- SIMILARITY: This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement. (See http://www.isb-sib.ch/announce/ or send an email to license@isb-sib.ch).	
CC CC This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement. (See http://www.isb-sib.ch/announce/ or send an email to license@isb-sib.ch).	
CC DR M23237; AAA49927; 1;	
CC DR M23238; AAA49928; 1;	
CC DR X17545; CAA35583; 1;	
CC DR S08220; S08220;	
CC DR RSSP; P01127; 1PBG.	
CC DR IPR002400; GF_cysknot.	
CC DR InterPro; IPR00072; PDGF.	
CC DR PFAM; PF00341; PDGF.	
CC DR PRINTS; PRO0438; GFCKNOT.	
CC DR PRODOM; P0001629; PDGF.	
CC DR SMART; SM00141; PDGF.	
CC DR PROSITE; PS00249; PDGF.	
CC DR PROSITE; PS00278; PDGF.	
CC DR GLyccoprotein; Mitogen; Growth factor; Platelet; Alternative splicing; KW Signal.	
CC FT SIGNAL 22	
CC FT PROPEP 23 91 REMOVED BY PROTEOLYSIS.	
CC FT CHAIN 92 226 PLATELET DERIVED GROWTH FACTOR, A CHAIN.	
CC FT DISULFID 101 145 BY SIMILARITY.	
CC FT DISULFID 134 182 BY SIMILARITY.	
CC FT DISULFID 138 184 BY SIMILARITY.	
CC FT DISULFID 128 128 INTERCHAIN (BY SIMILARITY).	
CC FT DISULFID 137 137 INTERCHAIN (BY SIMILARITY).	
CC FT DISULFID 139 139 N LINKED (GLCNAC . . .) (PROBABLE).	
CC FT VARSPHIC 198 200 GFP -> DVR (IN SHORT ISOFORM).	
CC FT VARSPHIC 201 226 MISSING (IN SHORT ISOFORM).	
CC FT CONFLICT 199 209 MISSING (IN REF. 2).	
CC FT CONFLICT 218 218 Q -> R (IN REF. 2).	
CC SQ SEQUENCE 226 AA; 25719 MW; E3E724FCFF7C2FB2 CRC64;	
Query Match 9	
Best Local Similarity 17.6%	
Matches 33; Conservative 14; Mismatches 32; Indels 26; Gaps 8;	
Matches 33; Best Local Similarity 31.4%; Score 105; DB 1; Length 226;	
Qy 11 CTPRNFSVSI-REELKRTDTIF-WGCLLVKRCGGNCACCLHNCQCPVKSYTKYH 67	
Db 101 CKTRTYIYEIPRSQIDPTSANFLIWPCVEYKRCGTG--CC-NPSVKCOPSPRI--HH 152	
Qy 68 -----EVQLRPTGVRGLHKSLTDVALEHHBECDCVERGST 104	
Db 153 RSVKVAKVEYRKPK-----LKEVL--VRLEEHLECTCTANSNS 190	
RESULT 9	
PDGB_HUMAN STANDARD:	
ID PDGB_HUMAN	
AC P01127; P70431;	
DT 21-JUL-1986 (Rel. 01, Created)	
DT 16-OCT-2001 (Rel. 40, Last annotation update)	
DE Platelet-derived growth factor, B chain Precursor (PDGF B-chain)	
DE (PDGF-2) (C-sis) (Bcaplermin), PDGF-B OR SIS.	
GN Homo sapiens (Human).	
OS Homoozygote; Metatzoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Buteraria; Primates; Catarrhini; Hominidae; Homo.	
OC NCBI_TaxID=9606;	
RN [1]	SEQUENCE FROM N.A.
RP SEQUENCE FROM N.A.	
RX MEDLINE=84250225; PubMed=6740330;	
RA Josephs S.F., Ratner L., Clarke M.F., Westtin E.H., Reitz M.S.,	

RA Wong-Staal F.; "Transforming potential of human c-sis nucleotide sequences encoding platelet-derived growth factor."; Science 225: 636-639(1984).
 RT PMID=636-639(1984).
 RL [2]

RP SEQUENCE FROM N.A. PMID=3517869;
 RA "Structure and sequence of the human c-sis/platelet-derived growth factor 2 (SIS/PDGF2) transcriptional unit."; Proc. Natl. Acad. Sci. U.S.A. 83:2392-2396(1986).
 RN [3]

RP SEQUENCE OF 22-241 FROM N.A. PMID=84205633; PubMed=6327048;
 RA Chiu I.-M., Reddy E.P., Givoli D., Robbins K.C., Tronick S.R., Aaronson S.A.; "Nucleotide sequence analysis identifies the human c-sis proto-oncogene as a structural gene for platelet-derived growth factor.";
 RL Cell 37:123-129(1984).
 RN [4]

RP SEQUENCE FROM N.A. PMID=85296313; PubMed=4033772;
 RA Collin T., Ginsburg D., Boss J.M., Orkin S.H., Pober J.S.; "Cultured human endothelial cells express platelet-derived growth factor B chain: cDNA cloning and structural analysis.";
 RL Nature 316:748-750(1985).
 RN [5]

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RP SEQUENCE FROM N.A. PMID=87217119; PubMed=3472769;
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RP SEQUENCE FROM N.A. PMID=87217120; Burgess J., Odeil J.C., Submitted (OCT-1996) to the EMBL/GenBank/DDBJ databases.
 RN SEQUENCE OF 1-53 FROM N.A. PMID=97141927; PubMed=8988177;
 RA Simon M.-P., Pedeutora F., Sirvent N., Grosgeorge J., Minoletti F., Coindre J.-M., Terrier-Lacombe M.-J., Mandahl N., Craver R.D., Blin N., Sozzi G., Turc-Carel C., O'Brien K.P., Kedra D., Pranssion I., Guillaud C., Dunanski J.P.; "Dereulation of the platelet-derived growth factor B-chain gene via fusion with collagen gene COL1A1 in dermatofibrosarcoma protuberans and giant-cell fibroblastoma.";
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 RA Weich H.A., Sebald W., Schairer H.U., Hoppe J.; "The human osteosarcoma cell line U-2 OS expresses a 3.8 kilobase mRNA which codes for the sequence of the PDGF-B chain.";
 RT FEBS Lett. 198:344-348(1986).
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 RN SEQUENCE OF 153-200 FROM N.A., AND PARTIAL SEQUENCE. PMID=85236121; PubMed=6329745;
 RA Johnson A., Heldin C.H., Westermark B., Deuel T.F., Huang J.S., Seubert P.H., Waterfield M.D.; "The c-sis gene encodes a precursor of the B chain of platelet-derived growth factor.";
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RP SEQUENCE OF 82-110. PMID=83197379; PubMed=6844921;
 RA Antoniades H.N., Hunkapiller M.W.; "Human platelet-derived growth factor (PDGF): amino-terminal amino acid sequence.";
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RP SEQUENCE OF 82-112. PMID=83244981; PubMed=6306471;
 RX RT
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 RN [13]

RP MUTAGENESIS, AND IMPORTANCE OF ARG-108 AND ILE-111 FOR RECEPTOR BINDING. PMID=92097530; PubMed=1661670;
 RX RT
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 RX RT
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 RL RT
 RA EMBL J. 11:3921-3926(1992).

CC -1- FUNCTION: PLATELET-DERIVED GROWTH FACTOR IS A POTENT MITOGEN FOR CELLS OF MESENCHYMAL ORIGIN. BINDING OF THIS GROWTH FACTOR TO ITS AFFINITY RECEPTOR ELICITS A VARIETY OF CELLULAR RESPONSES. IT IS RELEASED BY PLATELETS UPON WOUNDING AND PLAYS AN IMPORTANT ROLE IN STIMULATING ADJACENT CELLS TO GROW AND THEREBY HEAL THE WOUND.

CC -1- SUBUNIT: ANTIPARALLEL DISULFIDE-LINKED DIMER OF NONIDENTICAL (A AND B) CHAINS. HOMODIMERS OF A AND B CHAINS ARE IMPLICATED IN TRANSFORMATION PROCESSES.

CC -1- PHARMACEUTICAL: Available under the name Regranex (Ortho-McNeill). SIMON CAN BIND TO THE CC -1- MISCELLANEOUS: A-A AND B-B, AS WELL AS A-B, DIMERS CAN BIND TO THE PDGF RECEPTOR.

CC -1- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.

CC -1- DATABASE: NAME='D Systems, cytokine source book: PDGF; WWW="http://www.rndsystems.com/asp/G-sitebuilder.asp?bodyId=220".

CC -1- DATABASE: NAME=regranex; NOTE=Clinical information on Regranex; WWW="http://www.regranex.com/".

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CC DR EMBL; K01401; AAA60552; 1;
 DR EMBL; K01918; AAA60552; 1; JOINED;
 DR EMBL; J00121; AAA60552; 1; JOINED;
 DR EMBL; K01398; AAA60552; 1; JOINED;
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 DR EMBL; K01400; AAA60552; 1; JOINED;
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DR EMBL; X02744; CAA26524; 1; .
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 DR EMBL; X00561; CAA25229; 1; .
 DR EMBL; X98706; CAAG67262; 1; .
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 PDB; 1PDC; 31-JAN-94.
 MIM; 190040; .
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 KW Mitogen; Growth factor; Proto-oncogene; Platelet; Signal;
 KW Pharmaceutical; 3D-structure.
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 FT CHAIN 82 190
 FT PROPEP 191 241
 FT SITE 108 108
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 FT DISULFID 130 178
 FT DISULFID 134 180
 FT DISULFID 124 124
 FT DISULFID 133 133
 FT CONFLICT 21 21
 FT CONFLICT 101 101
 FT CONFLICT 105 105
 FT PROTEIN 17.6% 105
 Best Local Similarity 33.3%; Pred. No. 0.00043;
 Matches 36; Conservative 34; Indels 26; Gaps 9;
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 Db 88 IAEPAMIAECKTRTEFEIS+RKLIDRTNANFLWNPFCVEQRCSG---CC--NNRNVCQ 141
 Qy 58 VPSKVKKYHEVLQLRP---KTGV---RGHLKSSTDVALEHHECDC 98.
 Db 142 RPTQV----QLRPVQVRKIEVKKPLFKKAT-VTLEDHACKC 180.
 RESULT 10
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 AC P12919;
 DT 01-OCT-1989 (Rel. 12, Created)
 DT 16-OCT-2001 (Rel. 40, Last annotation update)
 DE Platelet-derived growth factor, B chain precursor (PDGF B-chain).
 DE PDGFB OR SIS.
 OS Felis silvestris catus (Cat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Carnivora; Fissipedia; Felidae; Felis.
 RN [1] SEQUENCE FROM N.A.
 RP MEDLINE=87146463; PubMed=3822831;
 RX van den Ouweland A.M.W.; van Groningen J.J.M.; Schalken J.A.,
 RA van Neek H.W.; Bloemers H.P.J.; van de Ven W.J.M.;
 RT "Genetic organization of the c-sis transcription unit."
 RL Nucleic Acids Res. 15:959-970(1987).

RN [2] REVISIONS.
 RP van den Ouweland A.M.W.;
 RA Submitted (Nov-1996) to the EMBL/Genbank/DDBJ databases.
 RL -!- FUNCTION: PLATELET-DERIVED GROWTH FACTOR IS A POTENT MITOGEN FOR CELLS OF MESOCHYMAL ORIGIN. BINDING OF THIS GROWTH FACTOR TO ITS AFFINITY RECEPTOR ELICITS A VARIETY OF CELLULAR RESPONSES. IT IS RELEASED BY PLATELETS UPON WOUNDING AND PLAYS AN IMPORTANT ROLE IN STIMULATING ADJACENT CELLS TO GROW AND THEREBY HEAL THE WOUND.
 CC -!- SUBUNIT: ANTIPARALLEL DISULFIDE-LINKED DIMER OF NONIDENTICAL (A AND B) CHAINS. HOMODIMERS OF A AND B CHAINS ARE IMPLICATED IN TRANSFORMATION PROCESSES.
 CC -!- MISCELLANEOUS: A-A AND B-B, AS WELL AS A-B, DIMERS CAN BIND TO THE PDGF RECEPTOR.
 CC -!- SIMILARITY: BELONGS TO THE PDGF/YEGF FAMILY OF GROWTH FACTORS.
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 CC EMBL; X05112; CAA28758; 1; ALT_SEQ.
 DR PIR; A26402; TWCNS.
 DR HSSP; P01127; 1PDC.
 DR InterPro; IPR002400; GF_cysknot.
 DR InterPro; IPR00072; PDGF.
 DR InterPro; IPR00341; PDGF.
 DR PRINTS; PR00438; GFcYSKNOT.
 DR PROSITE; PS001629; PDGF; 1.
 DR PRODOM; PDD01629; PDGF; 1.
 DR SMART; SM00141; PDGF; 1.
 DR PROSITE; PS00249; PDGF; 1.
 DR PROSITE; PS050278; PDGF; 2; 1.
 KW Mitogen; Growth factor; Proto-oncogene; Platelet; Signal.
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 FT CHAIN 82 194
 FT PROTEIN 195 245
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 DR DISULFID 694 695
 DR DISULFID 695 696
 DR DISULFID 696 697
 DR DISULFID 697 698
 DR DISULFID 698 699

OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;

[1] OC
OX NCBI_TaxID=9606;
RN SEQUENCE FROM N.A. (ISOFORM VEGF165).
RX MEDLINE=90063608; PubMed=2479986;
RA Leung D.W., Cachianes G., Kuang W.-J., Goeddel D.V., Ferrara N.;
RT "Vascular endothelial growth factor is a secreted angiogenic
mitogen";
RL Science 246:1306-1309(1989).

[2] RN SEQUENCE FROM N.A. (ISOFORM VEGF189), AND PARTIAL SEQUENCE.
RX MEDLINE=90063609; PubMed=2479987;
RA Hauser S.D., Krivi G., Sanzo K., Warren T., Feder J.,
Connolly D.T.;
RT "Vascular permeability factor, an endothelial cell mitogen related to
PDGF";
RL Science 246:1309-1312(1989).

[3] RN SEQUENCE FROM N.A. (ISOFORM VEGF189).
RX MEDLINE=91263072; PubMed=1711045;
RA Tischer E., Mitchell R., Hartman T., Silva M., Gospodarowicz D.,
Fiddes J.C., Abramson J.A.;
RT "The human gene for vascular endothelial growth factor. Multiple
protein forms are encoded through alternative exon splicing.";
RL J. Biol. Chem. 266:11947-11954 (1991).

[4] RN SEQUENCE FROM N.A. (ISOFORM VEGF206).
RX MEDLINE=9168017; PubMed=171831;
RA Houck K.A., Ferrara N., Wiener J., Cachianes G., Li B., Leung D.W.;
RT "The vascular endothelial growth factor family: identification of a
fourth molecular species and characterization of alternative splicing
of RNA.";
RT Mol. Endocrinol. 5:1806-1814(1991).

[5] RN SEQUENCE FROM N.A. (ISOFORM VEGF165).
RX MEDLINE=92231879; PubMed=1567395;
RA Weindel K., Marne D., Weich H.A.;
RT "AIDS-associated Kaposi's sarcoma cells in culture express vascular
endothelial growth factor.";
RL Biochim. Biophys. Res. Commun. 183:1167-1174(1992).

[6] RN SEQUENCE FROM N.A. (ISOFORM VEGF145).
RX MEDLINE=9720725; PubMed=9054410;
RA Poltorak Z., Cohen T., Sivan R., Kandelia Y., Spira G., Vlodavsky I.,
Keshet E., Neufeld G.;
RT "VEGF145, a secreted vascular endothelial growth factor isoform that
binds to extracellular matrix.";
RL J. Biol. Chem. 272:7151-7158(1997).

[7] RN SEQUENCE FROM N.A. (ISOFORM VEGF183).
RX TISSUE=Kidney;
RN MEDLINE=99096474; PubMed=9878851;
RA Lei J., Jiang A., Pei D.;
RT "Identification and characterization of a new splicing variant of
vascular endothelial growth factor: VEGF183.";
RL Biochim. Biophys. Acta 1443:400-406(1998).

[8] RN SEQUENCE FROM N.A. (ISOFORM VEGF165).
RX TISSUE=Breast;
RN MEDLINE=98110755; PubMed=9450968;
RA Claffey K.P., Shih S.-C., Mullien A., Dziennis S., Cusick J.L.,
Abrams K.R., Lee S.W., Detmar M.;
RT "Identification of a human VPF/VEGF 3' untranslated region mediating
hypoxia-induced mRNA stability.";
RL Mol. Biol. Cell 9:469-481(1998).

[9] RN SEQUENCE OF 114-209 FROM N.A. (ISOFORM VEGF183).
RX TISSUE=Retina;
RN MEDLINE=99165303; PubMed=10067980;
RA Jingjing L., Xue Y., Agarwal N., Roque R.S.;
RT "Human Muller cells express VEGF183, a novel spliced variant of
vascular endothelial growth factor.";
RL Invest. Ophthalmol. Vis. Sci. 40:752-759(1999).

[10] RN SEQUENCE FROM N.A. (ISOFORM VEGF165).
RX RP SP�QUENCE FROM N.A. (ISOFORM VEGF165);
RC RT TISSUE=Hemangiocytoblastoma;
RA RA Murata H., Fukushima J., Hattori S., Okuda K., Yanagi H.;
RT RT "Human cDNA for the vascular endothelial growth factor isoform
VEGF165.";
RT RL Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases.
RN RN [11] RN SEQUENCE FROM N.A. (ISOFORM VEGF148).
RX RP TISSUE=Renal glomerulus;
RC RT MEDLINE=99304945; PubMed=10464055;
RA Whittle C.J., Gillespie K.M., Harrison R., Mathieson P.W.,
Harper S.J.;
RT RT "Heterogeneous vascular endothelial growth factor (VEGF) isoform mRNA
and receptor mRNA expression in human glomeruli, and the
identification of VEGF148 mRNA, a novel truncated splice variant.";
RT RL Clin. Sci. 97:303-312(1999).
RN RN [12] RN SEQUENCE FROM N.A. (ISOFORM VEGF121).
RX RP FROM N.A. (ISOFORM VEGF121).
RA Sato J.D., Whitney R.G.;
RT RT "Human cDNA for vascular endothelial growth factor isoform VEGF121.";
RT RL Submitted (DEC-1999) to the EMBL/GenBank/DDBJ databases.
RN RN [13] RN SEQUENCE FROM N.A. (ISOFORM VEGF121).
RX RP Williams S.;
RT RL Submitted (DEC-2000) to the EMBL/GenBank/DDBJ databases.
RN RN [14] RN PRELIMINARY SEQUENCE OF 27-36; 43-50 AND 59-81.
RX RP PRELIMINARY SEQUENCE OF 27-36; 43-50 AND 59-81.
RA Fiebich B.L., Jaeger B., Schoellmann C., Weindel K., Wilting J.,
RA RA Kochs G., Marne D., Hug H., Weich H.A.;
RT RT "Synthesis and assembly of functionally active human vascular
endothelial growth factor homodimers in insect cells.";
RT RL Eur. J. Biochem. 211:19-26(1993).
RN RN [15] RN SEQUENCE OF 27-41.
RX RP PRELIMINARY SEQUENCE OF 27-41.
RA Fiebich B.L., Jaeger B., Schoellmann C., Weindel K., Wilting J.,
RA RA Kochs G., Marne D., Hug H., Weich H.A.;
RT RT "Synthesis and assembly of functionally active human vascular
endothelial growth factor homodimers in insect cells.";
RT RL Eur. J. Biochem. 211:19-26(1993).
RN RN [16] RN X-RAY CRYSTALLOGRAPHY (2.5 ANGSTROMS) OF 34-135.
RX RP X-RAY CRYSTALLOGRAPHY (2.5 ANGSTROMS) OF 34-135.
RA Muller Y.A., Li B., Christinger H.W., Wells J.A., Cunningham B.C.,
RA RA de Vos A.M.;
RT RT "Vascular endothelial growth factor: crystal structure and functional
mapping of the kinase domain receptor binding site.";
RT RL Proc. Natl. Acad. Sci. U.S.A. 94:7192-7197(1997).
RN RN [17] RN X-RAY CRYSTALLOGRAPHY (1.93 ANGSTROMS) OF 34-135.
RX RP X-RAY CRYSTALLOGRAPHY (1.93 ANGSTROMS) OF 34-135.
RA Muller Y.A., Christinger H.W., Keyt B.A., de Vos A.M.;
RT RT "The crystal structure of vascular endothelial growth factor (VEGF)
refined to 1.93-A resolution: multiple copy flexibility and receptor-blocking
peptide.";
RT RL Structure 5:1325-1338(1997).
RN RN [18] RN X-RAY CRYSTALLOGRAPHY (1.9 ANGSTROMS) OF 39-134.
RX RP X-RAY CRYSTALLOGRAPHY (1.9 ANGSTROMS) OF 39-134.
RA Wiesmann C., Christinger H.W., Cochran A.G., Cunningham B.C.,
RA RA Fairbrother W.J., Keenan C.J., Meng G., de Vos A.M.;
RT RT "Crystal structure of the complex between VEGF and a receptor-blocking
peptide.";
RT RL Biochemistry 37:17765-17772(1998).
RN RN [19] RN STRUCTURE BY NMR OF 34-135.
RX RP STRUCTURE BY NMR OF 34-135.
RA Fairbrother W.J., Champé M.A., Christinger H.W., Keyt B.A.,
RA RA Starovasnik M.A.;
RT RT "Human 13C, and 15N backbone assignment and secondary structure of the
receptor-binding domain of vascular endothelial growth factor.";
RT RL Protein Sci. 6:2250-2260(1997).

RN [20]	STRUCTURE BY NMR OF 137-215;	SEQUENCE OF 8-204 FROM N.A.
RP MEDLINE=98298440; PubMed=9634701;	MEDLINE=93305723; PubMed=8318539;	RX
RX	Heeren R.; Weyer K.A.; Rouge M.; Loertscher P.; Pech M.;	RA
RA Fairbrother W.J.; Champe M.A.; Christanger H.W.; Keyt B.A.;	"Conservation in sequence and affinity of human and rodent PDGF	RT
RA Starovasnik M.A.;	ligands and receptors";	RT
RT "Solution structure of the heparin-binding domain of vascular	Biochim. Biophys. Acta 1173:294-302(1993).	RL
RT endothelial growth factor.";	[2]	RN
RL Structure 6:67-648(1998).	SEQUENCE FROM N.A.	RN
RN [21]	SEQUENCE FROM N.A.	RX
RP MEDLINE=93191115; PubMed=8447423;	SEQUENCE OF 58-196 FROM N.A. (SHORT FORM).	RX
RX MEDLINE=1320570; PubMed=11427521;	STRAIN=FISCHER 344; TISSUE=smooth muscle;	RC
RA Murphy J.F.; Fitzgerald D.J.;	MEDLINE=93225589; PubMed=8469035;	RX
RT "Vascular endothelial growth factor induces cyclooxygenase-dependent	Shibayama S.; Takishima T.	RA
RT proliferation of endothelial cells via the VEGF-2 receptor.";	"Increased expression of PDGF A- and B-chain genes in rat lungs with	RT
RL FASEB J. 15:1667-1669 (2001).	hypoxic pulmonary hypertension";	RT
-1- FUNCTION: Growth factor active in angiogenesis, vasculogenesis and	Am. J. Physiol. 264:L100-L106 (1993).	RL
CC endothelial cell growth. It induces endothelial cell	SEQUENCE FROM N.A. (SHORT FORM).	RN
CC proliferation, promotes cell migration, inhibits apoptosis, and	RX	RX
CC induces permeabilization of blood vessels. It binds to the	Xia Y.; Feng L.; Tang W.W.; Wilson C.B.;	RA
CC VEGFR1/Fit-1 and VEGFR2/Kdr receptors and to heparan sulfate and	"Cloning," and expression of rat platelet-derived growth factor	RA
CC heparin. Neuropilin-1 binds isoforms VEGF-165 and VEGF-145.	A-chain"; RT	RA
CC -1- SUBUNIT: Homodimer; disulfide-linked. Also found as heterodimer	independent of differential splicing of PDGF A-chain mRNA.;"	RT
CC with PIGF (by similarity).	SEQUENCE OF 58-196 FROM N.A. (SHORT FORM).	RN
CC -1- SUBCELLULAR LOCATION: VEGF121 is acidic and freely secreted.	STRAIN=FISCHER 344; TISSUE=smooth muscle;	RC
CC VEGF165 is more basic has heparin-binding properties and,	MEDLINE=93225589; PubMed=8469035;	RX
CC although a significant proportion remains cell-associated, most is	Szabo P.; Weksler B.B.; Whittington E.; Weksler B.B.;	RA
CC freely secreted. VEGF189 is very basic; it is cell-associated	"The age-dependent proliferation of rat aortic smooth muscle cells is	RT
CC after secretion and is bound avidly by heparin and the	independent of differential splicing of PDGF A-chain mRNA.;"	RT
CC extracellular matrix, although it may be released as a soluble	Mech. Ageing Dev. 67:79-89 (1993).	RN
CC form by heparin, heparanase or plasmin.	-1- FUNCTION: PLATELET-DERIVED GROWTH FACTOR IS A POTENT MITOGEN FOR	CC
CC VEGF165 is more basic has heparin-binding properties and,	CELLS OF MESENCHYMAL ORIGIN. BINDING OF THIS GROWTH FACTOR TO ITS	CC
CC although a significant proportion remains cell-associated, most is	AFFINITY RECEPTOR ELICITS A VARIETY OF CELLULAR RESPONSES. IT IS	CC
CC freely secreted. VEGF189 is very basic; it is cell-associated	RELEASED BY PLATELETS UPON WOUNDING AND PLAYS AN IMPORTANT ROLE	CC
CC after secretion and is bound avidly by heparin and the	IN STIMULATING ADJACENT CELLS TO GROW AND THEREBY HEAL THE WOUND.	CC
CC extracellular matrix, although it may be released as a soluble	-1- SUBUNIT: ANTI-PARALLEL DISULFIDE-LINKED DIMER OF NONIDENTICAL (A	CC
CC form by heparin, heparanase or plasmin.	AND B) CHAINS. HOMODIMERS OF A AND B CHAINS ARE IMPLICATED IN	CC
CC VEGF183, VEGF165/VEGF, VEGF148, VEGF145 and VEGF121; may be	TRANSFORMATION PROCESSES.	CC
CC produced by alternative splicing.	-1- ALTERNATIVE PRODUCTS: 2 isoforms: a long form (shown here) and a	CC
CC -1- TISSUE SPECIFICITY: The VEGF189, VEGF-165 and VEGF-121 isoforms	short form; are produced by alternative splicing.	CC
CC are widely expressed, whereas the VEGF206 and VEGF-145 are	-1- DEVELOPMENTAL STAGE: IN KIDNEY EPITHELIAL TISSUES, THE SHORTER	CC
CC uncommon.	FORM PREDOMINATES IN YOUNG (1 DAY OLD) RATS WHILE THE LONGER FORM	CC
CC -1- INDUCTION: Regulated by growth factors, cytokines, gonadotropins,	-1- DOMAIN: The long form contains a basic insert which acts as a cell	CC
CC nitric oxide, hypoxia, hyperglycemia and oncogenic mutations.	receptor signal.	CC
CC -1- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.	-1- MISCELLANEOUS: A-A AND B-B, AS WELL AS A-B, DIMERS CAN BIND TO THE	CC
CC -1- DATABASE: NAME=R&D Systems, cytokine mini-reviews: VEGF;	PDGF RECEPTOR.	CC
CC WWW="http://www.rndsystems.com/asp/g_sitebuilder.asp?bodyid=230".	-1- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.	CC
CC ---	This SWISS-PROT entry is copyright. It is produced through a collaboration	CC
CC between the Swiss Institute of Bioinformatics and the EMBL outstation	between the Swiss Institute of Bioinformatics and the EMBL outstation -	CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration	the European Bioinformatics Institute. There are no restrictions on its	CC
CC between the Swiss Institute of Bioinformatics and the EMBL outstation	use by non-profit institutions as long as its content is in no way	CC
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CC between the Swiss Institute of Bioinformatics and the EMBL outstation	entities requires a license agreement. (See http://www.isb-sib.ch/announce/ or send an email to license@isb-sib.ch).	CC
Query Match 17.5%; Score 104.5%; DB 1; Length 232;	DR L06894; AA59693 1; -	CC
Best Local Similarity 27.0%; Pred. No. 0_00046;	DR 214120; CAA78490 1; -	CC
Matches 24; Conservative 21; Missmatches 33; Indels 11; Gaps 4;	DR EMBL; D10106; BAA0987 1; -	CC
Qy 11 CTPRNFSVIREEL-KRDTIFWPGCLLIVKRGGGNCACCLHNCNECOPVSKVTKYHEV 69	DR EMBL; L06238; AA41932 1; -	CC
Db 52 CHPETLVIFQEPDTEYIFPKSCVPLMRCGG---CC--NDEGLECVPTEESNTMQI 106	DR EMBL; S57664; AAB26134 2; -	CC
Qy 70 LQLRKPTGYGLKSLTDYALEHHECDC 98	DR HSSP; P01127; IPDG.	CC
Db 107 MRTKPHQG ---QHIGMSEFLQHNKCEC 130	DR InterPro; IPR002400; GF_cysknot.	CC
RESULT 1.2	DR InterPro; IPR00072; PDGF.	CC
ID PDGA_RAT	DR PF00341; PDGF.	CC
AC P2876; STANDARD; PRT; 204 AA.	DR PRINTS; PRO0438; GFCYKNOT.	CC
DT 01-FEB-1992 (Rel. 24, Created)	DR PRODOM; PDD01629; PDGF; 1.	CC
DT 01-MAR-2002 (Rel. 41, Last annotation update)	DR SMART; SM0141; PDGF; 1.	CC
DE Platelet-derived growth factor, A chain precursor (PDGF A-chain)	DR PROSITE; PS00249; PDGF; 1.	CC
GN PDGA OR RPAL	DR PROSITE; PS50278; PDGF; 1.	CC
OS Rattus norvegicus (Rat);	KW Glycoprotein; Mitogen; Growth factor; Platelet; Alternative splicing;	CC
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	KW Signal.	CC
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.	FT SIGNAL 1 20	CC
OX NCBI_TaxID=10116;	FT PROPEP 21 85 BY SIMILARITY.	CC
OX	REMOVED BY PROTEOLYSIS.	CC

FT	CHAIN	86	204	PLATELET-DERIVED GROWTH FACTOR, A CHAIN.	RL	FEBS Lett. 223:243-246(1987).
FT	SITE	158	162	RECEPTOR BINDING SITE (POTENTIAL).	RN	[5]
FT	DISULFID	96	140	BY SIMILARITY.	RP	SEQUENCE OF 1-53 FROM N.A.
FT	DISULFID	129	177	BY SIMILARITY.	RX	Medline=9252628; PubMed=8486221;
FT	DISULFID	133	179	BY SIMILARITY.	RA	Takimoto Y., Li W.Y., Wang Z.Y., Tong B.D., Deuel T.F.;
FT	DISULFID	123	123	INTERCHAIN (BY SIMILARITY).	RT	"Nucleotide sequence of the 5'-region of the human platelet-derived
FT	DISULFID	132	132	N-LINKED (GUCNAC . . .) (BY SIMILARITY).	RT	growth factor A-chain gene.";
FT	CARBONYD	134	134	N-LINKED (GUCNAC . . .) (BY SIMILARITY).	RL	Hiroshima J. Med. Sci. 42:47-52(1993).
FT	VARSPLIC	194	196	GRR -> DVR (IN SHORT ISOFORM).	RN	[6]
FT	VARSPLIC	197	204	MISSING (IN SHORT ISOFORM).	RP	ALTERNATIVE SPLICING.
FT	CONFFLICT	85	111	KRSIEEPAVCKTRVTPRSQD -> REVLRKPFQD	RX	Medline=87287248; PubMed=3614363;
FT	CONFFLICT	119	119	FAPRGFETRILGARWT (IN REF. 2).	RA	Tong B.D., Auer D.E., Jaye M., Kaplow J.M., Ricca G., McConathy E.,
SQ	SEQUENCE	204 AA;	23307 MW;	I -> T (IN REF. 3).	RA	Drohan W., Deuel T.F.;
				FA413E74E86F742C CRC64;	RT	"cDNA clones reveal differences between human glial and endothelial
					RT	cell platelet-derived growth factor A-chains.";
					RL	Nature 329:619-621(1987).
					RN	[7]
					RP	ALTERNATIVE SPLICING.
					RX	Medline=87287248; PubMed=3614364;
					RA	Collins T., Bonthron D.T., Orkin S.H.;
					RT	"Alternative RNA splicing affects function of encoded platelet-derived
					RT	growth factor A chain.";
					RT	RT
					RL	Nature 328:621-624(1987).
					RN	[8]
					RP	INTERCHAIN DISULFIDE BONDS.
					RX	Medline=92283833; PubMed=1317862;
					RA	Andersson M., Oestman A., Baeckstroem G., Hellman U.,
					RA	George-Nascimento C., Westermark B., Heldin C.-H.;
					RT	"Assignment of interchain disulfide bonds in platelet-derived growth
					RT	factor (PDGF) and evidence for agonist activity of monomeric PDGF.";
					RL	J. Biol. Chem. 267:11260-11266(1992).
					CC	-!- FUNCTION: PLATELET-DERIVED GROWTH FACTOR IS A POTENT MITOGEN FOR
					CC	CELLS OF MESENCHYMAL ORIGIN. BINDING OF THIS GROWTH FACTOR TO ITS
					CC	AFFINITY RECEPTOR ELICTS A VARIETY OF CELLULAR RESPONSES. IT IS
					CC	RELEASED BY PLATELETS UPON WOUNDING AND PLAYS AN IMPORTANT ROLE
					CC	IN STIMULATING ADJACENT CELLS TO GROW AND THEREBY HEAL THE WOUND.
					CC	-!- SUBUNIT: ANTIPARALLEL DISULFIDE-LINKED DIMER OF NONIDENTICAL (A
					CC	AND B) CHAINS. HOMODIMERS OF A AND B CHAINS ARE IMPLICATED IN
					CC	TRANSFORMATION PROCESSES.
					CC	-!- ALTERNATIVE PRODUCTS: 2 isoforms; a long form (shown here) and a
					CC	short form; are produced by alternative splicing.
					CC	-!- DOMAIN: The long form contains a basic insert which acts as a cell
					CC	retention signal.
					CC	-!- MISCELLANEOUS: A-A AND B-B, AS WELL AS A-B, DIMERS CAN BIND TO THE
					CC	PDGF RECEPTOR.
					CC	-!- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.
					CC	-!- DATABASE: NAME=RD Systems, cytokine mini-reviews: PDGF.
					CC	WWW="http://www.rndsystems.com/asp/g_sitebuilder.asp?bodyId=220".
					CC	This SWISS-PROT entry is copyright. It is produced through a collaboration
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					CC	CC
					DR	M21571; -; NOT_ANNOTATED_CDS.
					DR	EMBL; X03755; CAA27421.1; -.
					DR	EMBL; X06374; CAA29577.1; -.
					DR	EMBL; M20434; AAA60045.1; JOINED.
					DR	EMBL; M20438; AAA60045.1; JOINED.
					DR	EMBL; M20439; AAA60045.1; JOINED.
					DR	EMBL; M20491; AAA60045.1; JOINED.
					DR	EMBL; M20492; AAA60045.1; JOINED.
					DR	EMBL; M20493; AAA60045.1; JOINED.
					DR	EMBL; M19987; AAA60046.1; JOINED.
					DR	EMBL; M21571; AAA60046.1; JOINED.
					DR	EMBL; M19984; AAA60046.1; JOINED.
					DR	EMBL; M19985; AAA60046.1; JOINED.
					DR	EMBL; M19986; AAA60046.1; JOINED.
					DR	EMBL; M19987; AAA60046.1; JOINED.

Query Match Score 104; DB 1; Length 211;

Best Local Similarity	Score	DB	Length
34.0%	104	No. 0_00048	211
Matches		Indels	Gaps
32; Conservative	34;	34;	6;
12; Mismatches			

Qy 11 CTPTRNFVSI-REBELKRDTIF-WPGCLLYKRCGGNCACCLHNCGCQCYP SKV --TK 64
Db 96 CKTRTVIYEIPRSQVDPTSANLIWPPCVCVKRTG --CC -NTSSYKQCPQSVRHRSV 150

Qy 65 KYHEVLQLRKPTGYRGLHKSLTDVALEHHEECDC 98
Db 151 KVAKVETYRKPKLKEV ----QVRLBEEHLIECAC 179

RESULT 14

PDGFR_MOUSE STANDARD; PRT; 211 AA.

ID PDGFR_MOUSE STANDARD; PRT; 211 AA.

AC P200133; DT 01-FEB-1991 (Rel. 17, Created)
 DT 01-OCT-1996 (Rel. 34, Last sequence update)

DE Platelet-derived growth factor, A chain precursor (PDGF A-chain) (PDGF-1).

GN PDGFR.

OS Mus musculus (Mouse).
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 NCBI_TAXID=10090;

OX [11] RN 111

RP SEQUENCE FROM N.A. (LONG AND SHORT FORMS).

RC STRAIN=BALB/C;

RX MEDLINE=94031105; PubMed=1340209;

RA Rorsholt F.; Betsholtz C.; RT "Characterization of the mouse PDGF A-chain gene. Evolutionary RT conservation of gene structure, nucleotide sequence and alternative RT splicing.";

RL Growth Factors 6:303-313(1992).
 RN [2]
 RP Sequence from N.A. (short form).
 RC SPRAIN-F9;
 RX MEDLINE=90169294; PubMed=2155144;
 RA Mercola M.; Wang C.; Kelly J.; Brownlee C.; Jackson-Grusby L.,
 Stiles C.; Bowen Pope D.;
 RT "selective expression of PDGF A and its receptor during early mouse embryogenesis.";
 Dev. Biol. 138:114-122(1990).
 CC -!- FUNCTION: PLATELET-DERIVED GROWTH FACTOR IS A POTENT MITOGEN FOR CELLS OF MESENCHYMAL ORIGIN. BINDING OF THIS GROWTH FACTOR TO ITS AFFINITY RECEPTOR ELICTS A VARIETY OF CELLULAR RESPONSES. IT IS RELEASED BY PLATELETS UPON WOUNDING AND PLAYS AN IMPORTANT ROLE IN STIMULATING ADJACENT CELLS TO GROW AND THEREBY HEALS THE WOUND.

DR SUBUNIT: ANTI-PARALLEL DISULFIDE-LINKED DIMER OF NONIDENTICAL (A AND B) CHAINS. HOMODIMERS OF A AND B CHAINS ARE IMPLICATED IN TRANSFORMATION PROCESSES.

CC -!- ALTERNATIVE PRODUCTS: 2 isoforms; a long form (shown here) and a short form; are produced by alternative splicing which acts as a cell retention signal.

CC -!- MISCELLANEOUS: A-A AND B-B, AS WELL AS A-B, DIMERS CAN BIND TO THE PDGF RECEPTOR.

CC -!- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.

CC -!- DOMAIN: The long form contains a basic insert which acts as a cell retention signal.

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CC -!- DOMAIN: S66871; AAB28740.2;
 DR EMBL; S66868; AAB28740.2; JOINED.
 DR EMBL; S66869; AAB28740.2; JOINED.
 DR EMBL; S66870; AAB28740.2; JOINED.
 DR EMBL; S66871; AAB28740.2; JOINED.
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CC -!- DOMAIN: S66872; AAB28740.2;
 DR EMBL; S66873; AAB28740.2; JOINED.
 DR EMBL; S66874; AAB28741.2;
 DR EMBL; S66875; AAB28741.2; JOINED.
 DR EMBL; S66876; AAB28741.2; JOINED.
 DR EMBL; S66877; AAB28741.2; JOINED.
 DR EMBL; S66878; AAB28741.2; JOINED.
 DR EMBL; S66879; AAB28741.2; JOINED.
 DR EMBL; M29464; AAA39903.1;
 PIR; A37359; A37359.
 DR ISSP; P01127; 1PDC.
 DR NGD; MGI:97527; Pdgfa.
 DR InterPro; IPR002400; GF_cysknot.
 DR InterPro; IPR000072; PDGF.
 DR Pfam; PF00341; PDGF.
 DR PRINTS; PRO0438; GFcYSKNOT.
 DR PRODom; PDD001629; PDGF.
 DR SMART; SM00141; PDGF.
 DR PROSITE; PS00249; PDGP_1.
 DR PROSITE; PS50276; PDGP_2.
 DR Glycoprotein; Mitogen; Growth factor; Platelet; Platelet; Alternative splicing; Signal.

FT SIGNAL. 1 20
 FT PROPEP 2 1 86
 FT CHAIN 87 211
 FT SITE 158 162
 FT DISULFID 162 140
 FT DISULFID 129 177
 FT DISULFID 133 179
 FT DISULFID 123 123
 FT DISULFID 132 123
 FT DISULFID 132 132
 FT DISULFID 134 134
 FT DISULFID 133 194
 FT DISULFID 132 195
 FT DISULFID 132 197
 FT DISULFID 92 92

FT PROPEP 21 86
 FT CHAIN 87 211
 FT SITE 158 140
 FT DISULFID 96 140
 FT DISULFID 129 177
 FT DISULFID 133 179
 FT DISULFID 123 123
 FT DISULFID 132 132
 FT CARBOHYD 134 134
 FT VARSPLIC 194 195
 FT VARSPLIC 197 211
 FT VARSPLIC 92 92

Query Match 17.4%; Score 104; DB 1; Length 211;
 Best Local Similarity 34.0%; Pred. No. 0.00048;
 Matches 32; Conservative 12; Mismatches 34; Indels 16; Gaps 6;

Search completed: May 24, 2002, 10:02:03
 Job time: 202 sec

RESULT 15

TSIS_SMSAV ID TSIS_SMSAV STANDARD; PRT; 226 AA.

AC P01128; 041283; DR 21-JUL-1986 (Rel. 01, Created)
 DT 21-JUL-1986 (Rel. 01, Last sequence update)
 DT 01-MAR-2002 (Rel. 41, Last annotation update)

DE PDGF-related transforming protein sis (p28sis).

GN V-SIS.

OS Simian sarcoma virus.

OC Viruses; Retroviridae; Retroviridae; Gamma-retrovirus.

OX NCBI_TaxID=11817;

RN [1]

RP SEQUENCE FROM N.A.
 MEDLINE=33144004; PubMed=6298772;

RA Devere S.G., Reddy E.P., Law J.D., Robbins K.C., Aaronson S.A.;

RT "Nucleotide sequence of the simian sarcoma virus genome:
 demonstration that its acquired cellular sequences encode the
 transforming gene product p28sis".
 Proc. Natl. Acad. Sci. U.S.A. 80:731-735 (1993).
 RL -!- SIMILARITY: BELONGS TO THE PDGF/YEGF FAMILY OF GROWTH FACTORS.

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DR EMBL; V01201; CAA24516.1; ALT_INIT.

DR PIR; A01381; TVWVSS.

DR HSSP; P01127; LPDG.

DR InterPro; IPR02400; GE_cysknot.

DR InterPro; IPR00072; PDGF.

DR Pfam; PF00341; PDGF; 1.

DR PRINTS; PR00438; GFCSYKNOT.

DR PRODOM; PD001629; PDGF; 1.

DR SMART; SM00141; PDGF; 1.

DR PROSITE; PS00249; PDGF; 1.

DR PROSITE; PS50378; PDGF; 2; 1.

KW Oncogene; Growth factor.

SQ SEQUENCE 226 AA; 25411 MW; A16813ABB95B90C5 CRC64;

Query Match 17.4%; Score 104; DB 1; Length 226;
 Best Local Similarity 33.3%; Pred. No. 0.00051;
 Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;

Query 2 LTEEVRLYSCTPRN-FSVSISTREELKRTDTIF-WPGCLLVKRCGGNCACCLHNCNCBQC 57
 Y 73 VAEPAMIACKTRTEVEFEIS-RRLEIDRINANFLWPPCEVYQRCSG--CC-NNRNYQC 126

Query 58 VPSKVTKYHEVILQLRP---KTVG---RGHLRSLTDVALEHHEDC 98
 Db 127 RPTQV-----QLRPVQVRKIEIVRKPIFKKAT-VTLEDHLACKC 165

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: May 24, 2002, 09:58:21 ; Search time 24.76 Seconds
(without alignments)
740.608 Million cell updates/sec

Title: US-09-695-121-2_COPY_240_345
Perfect score: 597
Sequence: 1 LLTBEVRLYSCTPRNFSVSI.DVALEHHHECDCVCRGSGGG 106

Scoring table: BL0SN62
Gapop 10.0 , Gapext 0.5

Searched: 562222 seqs, 172994929 residues

Total number of hits satisfying chosen parameters: 562222.

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SPTREMBL_19:
 1: sp_archaea:
 2: sp_bacteria:
 3: sp_fungi:
 4: sp_human:
 5: sp_invertebrate:
 6: sp_mammal:
 7: sp_mhc:
 8: sp_organelle:
 9: sp_phage:
 10: sp_plant:
 11: sp_rabbit:
 12: sp_virus:
 13: sp_vertebrate:
 14: sp_unclassified:
 15: sp_rvirus:
 16: sp_bacteriopl:
 17: sp_archeap:
 18: sp_bacilli:
 19: sp_chloroplast:
 20: sp_ciliates:
 21: sp_endosymbiont:
 22: sp_gammaproteobact:
 23: sp_helminth:
 24: sp_insect:
 25: sp_lowcomplexity:
 26: sp_lowcomplexity:
 27: sp_lowcomplexity:
 28: sp_lowcomplexity:
 29: sp_lowcomplexity:
 30: sp_lowcomplexity:
 31: sp_lowcomplexity:
 32: sp_lowcomplexity:
 33: sp_lowcomplexity:
 34: sp_lowcomplexity:
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 38: sp_lowcomplexity:
 39: sp_lowcomplexity:
 40: sp_lowcomplexity:
 41: sp_lowcomplexity:
 42: sp_lowcomplexity:
 43: sp_lowcomplexity:
 44: sp_lowcomplexity:
 45: sp_lowcomplexity:

ALIGNMENTS

RESULT 1
Q9NRA1 PRELIMINARY; PRN; 345 AA.
ID Q9NRA1;
AC Q9NRA1;
DT 01-OCT-2000 (TREMBLrel. 1, 15, Created)
DT 01-OCT-2000 (TREMBLrel. 15, Last sequence update)
DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)
DE PLATELET-DERIVED GROWTH FACTOR C.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
RN NCBI_TAXID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=LUNG;
RX MEDLINE=20268201; PubMed=10806482;

RA Li X., Ponten A., Aase K., Karlsson L., Abramsson A., Utetela M., Hellstrom G., Hellstrom M., Li H., Soriano P., RA Beisholtz C., Heldin C.-H., Alitalo K., Ostman A., Eriksson U.; RT "PnGF-C is a new protease-activated ligand for the PDGF alpha receptor." Nat. Cell Biol. 2:302-309 (2000)
RT Receptor.; RL Cell 114(1):11-18 (2001); DR SMART; SM00042; CUB; 1.
CC -1- SIMILARITY: CONTAINS 1 CUB DOMAIN.
DR EMBL; AP24413; AAF80971.; DR InterPro; IPR000539; CUB.
DR InterPro; IPR000072; PDGF.
DR Pfam; PF00431; CUB; 1.
DR Pfam; PF00311; PDGF; 1.
DR SMART; SM00042; CUB; 1.
DR SMART; SM00411; PDGF; 1.
DR PROSITE; PS01180; CUB; 1.
DR PROSITE; PS02728; PDGF; 2; 1.
SQ SEQUENCE 345 AA; 39043 MW; 590889CEA55CC5SEA CRC64;

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query	Match	Length	DB ID	Description
1	597	100.0	345	4	Q9NRA1	Q9nra1 homo sapien
2	597	100.0	345	4	Q9UL22	Q9ul22 homo sapien
3	572	95.8	345	11	Q9OY71	Q9oy71 mus musculu
4	565	94.6	345	11	Q9JHIV8	Q9jhiv8 mus musculu
5	563	94.3	345	11	Q9EON6	Q9eqx6 ratius norv
6	527	88.3	345	13	Q9IB46	Q9ib46 gallus gall
7	305.5	51.2	290	11	Q9DL18	Q9dl18 mus musculu
8	305.5	51.2	364	4	Q9BWV5	Q9bav5 homo sapien
9	305.5	51.2	370	11	Q9GEQ1	Q9eq1 ratius norv
10	305.5	51.2	370	11	Q9EQT1	Q9eq1 ratius norv
11	305.5	51.2	370	11	Q9IB57	Q9ib57 mus musculu
12	180	30.2	34	11	Q9QDM4	Q9qdm4 mus musculu
13	17.5	19.7	326	11	Q9IBE4	Q9ibe4 ratius norv
14	14.5	19.2	146	13	Q9OZ23	Q9oz23 bothrops ja
15	10.8.5	18.2	148	13	Q42571	Q42571 xenopus lae
16	10.8.2	18.2	194	13	Q42572	Q42572 xenopus lae

Query Match 100.0%; Score 597; DB 4; Length 345;
Best Local Similarity 100.0%; Pred. No. 2.7e-66;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RA	Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J., Schiraldi L.M., Staubli F., Tomita M., Wagner L., Washio T., Sakai K., Okido T., Furuno M., Ago H., Baldarelli R., Barsh G., Blake J., Boffelli D., Bojunga N., Carrinci P., de Bonaldo M.R., Gustincich S., Hill D., Fletcher C., Fujita M., Kamiya M., Lee N.H., Lyons P., Marchionni L., Mashima J., Mazzarelli J., Monbaerts P., Norzone P., Ring B., Rodriguez I., Sakano N., Suzuki H., Sato K., Scheibenbich C., Seiya T., Shibusawa Y., Storch K.-F., Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L., Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Hayashizaki Y.;	Query Match Score 51.28; Best Local Similarity 52.9%; Matches 54; Conservative 13; Indels 3; Gaps 1;
RT	"Functional annotation of a full-length mouse cDNA collection.";	
CC	-1 SIMILARITY: CONTAINS 1 CUB DOMAIN.	
DR	EMBL; AK003359; BAB22735; 1;	
DR	MGD; MG1:1919035; 1:1000310Rik.	
DR	InterPro; IPR000855; CUB.	
DR	InterPro; IPR000072; PDGF.	
DR	Pfam; PF00031; CUB; 1.	
DR	SMART; SM00141; PDGF; 1.	
DR	PROSITE; PS01180; CUB; 1.	
DR	PROSITE; PS50378; PDGF; 2; 1.	
SQ	SEQUENCE 290 AA; 33435 MW; 14214509E6717D4B CRC64;	
RESULT 9		
ID	Q9ZP0	PRELIMINARY;
ID	Q9ZP0	PRT; 370 AA.
AC	Q9ZP0;	PRELIMINARY;
DT	01-MAR-2001 (TREMBLrel. 16, Created)	
DT	01-MAR-2001 (TREMBLrel. 16, Last sequence update)	
DT	01-DEC-2001 (TREMBLrel. 19, Last annotation update)	
DE	SPINAL CORD-DERIVED GROWTH FACTOR-B (MSTP36) (IRIS-EXPRESSED GROWTH FACTOR LONG FORM) (PLATELET-DERIVED GROWTH FACTOR D).	
DE	HSDGFB OR IEGF OR PDGF.	
GN	OS Homo sapiens (Human).	
OC	OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.	
OX	NCBI_TaxID=9606;	
RN		
RP	SEQUENCE FROM N.A.	
RC	TISSUE-AORTA;	
RA	Liu B., Liu Y.Q., Wang X.Y., Zhao B., Sheng X.W., Liu S., Hamada T., Ui-Tei K., Imaki J., Miyata Y.;	
RA	Xu Y.Y., Ye J., Song L., Gao Y., Zhang C.L., Zhang J., Wei Y.J., Cao H.Q., Zhao Y., Liu L.S., Ding J.F., Gao R.L., Wu Q.J., Qiang B.Q., Blochem. Biophys. Res. Commun. 0:0-0(2000).	
RN		
[1]		
RP	SEQUENCE FROM N.A.	
RC	TISSUE-AORTA;	
RA	Liu B., Liu Y.Q., Wang X.Y., Zhao B., Sheng X.W., Liu S., Hamada T., Ui-Tei K., Imaki J., Miyata Y.;	
RA	Xu Y.Y., Ye J., Song L., Gao Y., Zhang C.L., Zhang J., Wei Y.J., Cao H.Q., Zhao Y., Liu L.S., Ding J.F., Gao R.L., Wu Q.J., Qiang B.Q., Blochem. Biophys. Res. Commun. 0:0-0(2000).	
RA	Yuan J.G., Liew C.C., Zhao M.S., Hui R.T.;	
RL	Submitted (DEC-1998) to the EMBL/GenBank/DBJ databases.	
RN		
[2]		
RP	SEQUENCE FROM N.A.	
RC	TISSUE-IRIS;	
RA	Wistow G.;	
RA	"Iris-expressed Growth Factor (IEGF)." ;	
RT	Submitted (FEB-2001) to the EMBL/GenBank/DBJ databases.	
RN		
[3]		
RP	SEQUENCE FROM N.A.	
RC	TISSUE-IRIS;	
RA	Bergsten E., Utteila M., Li X., Pietras K., Ostman A., Heldin C.H., Alitalo K., Eriksson U.;	
RT	"PDGF-D is a specific, protease-activated ligand for the PDGF beta-receptor." ;	
RT	Submitted (FEB-2001) to the EMBL/GenBank/DBJ databases.	
RN		
[4]		
RP	SEQUENCE FROM N.A.	
RC	TISSUE-IRIS;	
RA	Wistow G.;	
RA	"Iris-expressed Growth Factor (IEGF)." ;	
RT	Submitted (FEB-2001) to the EMBL/GenBank/DBJ databases.	
CC	-1 SIMILARITY: CONTAINS 1 CUB DOMAIN.	
EMBL	AY027518; AAK00859; CUB; 1.	
DR	InterPro; IPR000859; CUB.	
DR	InterPro; IPR000072; PDGF.	
DR	InterPro; IPR00051; TonB_boxC.	
DR	Pfam; PF00431; CUB; 1.	
DR	SMART; SM00042; CUB; 1.	
DR	SMART; SM01411; PDGF; 1.	
DR	PROSITE; PS01180; CUB; 1.	
DR	PROSITE; PS50278; PDGF; 2; 1.	
DR	PROSITE; PS00430; TONB_DEPENDENT_REC_1; UNKNOWN_1.	
DR	SEQUENCE 364 AA; 42166 MW; 2453538DEA9EAC CRC64;	
SQ		

DR	Pfam; PF00431; CUB; 1;	DR	01-DEC-2001 (TREMBLrel. 19, Last annotation update)
DR	SMART; SM00042; CUB; 1;	DE	PLATELET-DERIVED GROWTH FACTOR D.
DR	SMART; SM00141; PDGF; 1;	OS	Mus musculus (Mouse).
DR	PROSITE; PS01180; CUB; 1;	OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
DR	PROSITE; PS00278; PDGE_2; 1;	OC	Mammalia; Eutheria; Rodentia; Sciurognath; Muridae; Murinae; Mus.
DR	PROSITE; PS00430; TONB_DEPENDENT_REC_1; UNKNOWN_1;	NCBI_TAXID	10090;
SEQUENCE	370 AA; 42848 MW; D387485E7BB7674 CRC64;	RN	[1]
RP	SEQUENCE FROM N.A.	RC	
STRAIN=BALB/C;		RX	
Query Match	51.2%; Score 305.5; DB 4; Length 370;	RA	Medline=21331882;
Best Local Similarity	52.9%; Pred. No. 7.4e-30;	RA	La Rochelle W.J., Jeffers M., McDonald W.F., Chillakuru R.A.,
Matches	54; Conservative 13; Mismatches 32; Indels 3; Gaps 1;	RA	Giese N.A., Lokier N.A., Sullivan C., Boldog F.L., Yang M., Vernet C.,
Qy	2 LTEEVRLYSCTPRNFVSIRREELKRTDTIFWPGCLLIVKRGGNNCACCLHNNECCQVPSK 61	RA	Fernandez E., Deegler L.L., Shimkets J.,
Db	263 LNDAKRYSCTPRNFVSIRREELKRTDTIFWPGCLLIVKRGGNNCACCLHNNECCQVPSK 61	RA	Shimkets R.A., Rothberg J.M., Lichenstein H.S.;
Qy	62 VTKKYHEVLQLRP--KTGVRLHKSLTDVALEHHECDCVC 100	RT	"PDGF D, A Novel Protease Activated Growth Factor.";
Db	323 TVKKYHEVLQLFEPGHIKRRGAKNMALVDIQLDHHERCDCIC 364	RL	Cell Biol. 3:517-521 (2001).
Qy	62 VTKKYHEVLQLRP--KTGVRLHKSLTDVALEHHECDCVC 100	DR	EMBL; AF33583; AAK38839.1; -;
Db	323 TVKKYHEVLQLFEPGHIKRRGAKNMALVDIQLDHHERCDCIC 364	SQ	SEQUENCE 370 AA; 42809 MW; 9E80B4CF6813BFBE CRC64;
Query Match	51.2%; Score 305.5; DB 11; Length 370;	DR	
Best Local Similarity	52.0%; Pred. No. 7.4e-30;	DR	
Matches	53; Conservative 16; Mismatches 30; Indels 3; Gaps 1;	DR	
Qy	2 LTEEVRLYSCTPRNFVSIRREELKRTDTIFWPGCLLIVKRGGNNCACCLHNNECCQVPSK 61	Q99JTM4	PRELIMINARY; PRT; 34 AA.
Db	263 LNDVKRYSCTPRNFVSIRREELKRTDTIFWPGCLLIVKRGGNNCACCLHNNECCQVPSK 322	Q99JTM4	PRELIMINARY; PRT; 34 AA.
Qy	62 VTKKYHEVLQLRP--KTGVRLHKSLTDVALEHHECDCVC 100	Q99JTM4	PRELIMINARY; PRT; 34 AA.
Db	323 TVKKYHEVLQLFEPGHIKRRGAKNMALVDIQLDHHERCDCIC 364	Q99JTM4	PRELIMINARY; PRT; 34 AA.
RESULT	12	Q99JTM4	PRELIMINARY; PRT; 34 AA.
Q9EQ01	PRELIMINARY; PRT; 370 AA.	ID	Q99JTM4
AC		AC	Q99JTM4;
Q9EQ01; 16		DT	01-JUN-2001 (TREMBLrel. 17, Created)
DT	01-MAR-2001 (TREMBLrel. 16, Created)	DT	01-JUN-2001 (TREMBLrel. 17, Last sequence update)
DT	01-MAR-2001 (TREMBLrel. 16, Last sequence update)	DT	01-DEC-2001 (TREMBLrel. 19, Last annotation update)
DT	01-DEC-2001 (TREMBLrel. 19, Last sequence update)	DE	SIMILAR TO PLATELET-DERIVED GROWTH FACTOR, C POLYPEPTIDE (FRAGMENT).
DE	SPINAL-CORD DERIVED GROWTH FACTOR-B.	DE	(FRAGMENT).
GN	Rattus norvegicus (Rat).	OS	Mus musculus (Mouse).
OS	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognath; Muridae; Rattus.	OC	Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognath; Muridae; Murinae; Mus.
OC	NCBI_TAXID=10116;	OC	NCBI_TAXID=10090;
OX	[1]	RN	[1]
RN	SEQUENCE FROM N.A.	RP	SEQUENCE FROM N.A.
RP	SEQUENCE FROM N.A.	RC	TISSUE-MAMMARY TUMOR. WAP-TGF ALPHA MODEL. 7 MONTHS OLD, GROSS
RX	Medline=21092670; PubMed=11162582;	RC	TISSUE:
RA	Hamada T., Ue-Tei K., Imaki J., Miyata Y.; Molecular Cloning of SCDFG-B, a Novel Growth Factor Homologous to SCDFG/PDGF-C/falloionte."	RA	Strasbourg R.; Submitted (APR-2001) to the EMBL/GenBank/DDBJ databases.
RT	Biochem. Biophys. Res. Commun. 280:733-737 (2001).	RL	Strasbourg R.;
RL	CC -1- SIMILARITY: CONTAINS 1 CUB DOMAIN.	DR	EMBL; BC006027; AAH06027.1; -.
CC	EMBL; AB052170; BAB1820.1; -.	DR	NON_TER 1
DR	InterPro; IPR000859; CUB.	DR	SEQUENCE 34 AA; 3618 MW; F4AB6A3A414AE9E CRC64;
DR	InterPro; IPR00072; PDGF.	DR	Query Match 30.2%; Score 180; DB 11; Length 34;
DR	Pfam; PF00431; CUB; 1.	DR	Best Local Similarity 91.2%; Pred. No. 2.7e-15;
DR	SMART; SM00042; CUB; 1;	DR	Mismatches 2; Indels 0; Gaps 0;
DR	SMART; SM00141; PDGF; 1;	FT	
DR	PROSITE; PS01180; CUB; 1;	FT	
DR	PROSITE; PS00278; PDGF; 2.	FT	
SQ	SEQUENCE 370 AA; 42809 MW; 7BE8A251F679BF73 CRC64;	FT	
Query Match	51.2%; Score 305.5; DB 11; Length 370;	FT	
Best Local Similarity	52.0%; Pred. No. 7.4e-30;	FT	
Matches	53; Conservative 16; Mismatches 30; Indels 3; Gaps 1;	FT	
Qy	2 LTEEVRLYSCTPRNFVSIRREELKRTDTIFWPGCLLIVKRGGNNCACCLHNNECCQVPSK 61	Q92517	PRELIMINARY; PRT; 370 AA.
Db	263 LNDVKRYSCTPRNFVSIRREELKRTDTIFWPGCLLIVKRGGNNCACCLHNNECCQVPSK 322	AC	Q92517;
Qy	62 VTKKYHEVLQLRP--KTGVRLHKSLTDVALEHHECDCVC 100	AC	Q92517; PRELIMINARY; PRT; 370 AA.
Db	323 TVKKYHEVLQLFEPGHIKRRGAKNMALVDIQLDHHERCDCIC 364	AC	Q92517; PRELIMINARY; PRT; 370 AA.
RESULT	13	Q92517	PRELIMINARY; PRT; 370 AA.
Q92517	PRELIMINARY; PRT; 370 AA.	ID	Q92517
AC		AC	Q92517;
Q92517; 19		DT	01-DEC-2001 (TREMBLrel. 19, Created)
DT	01-DEC-2001 (TREMBLrel. 19, Last sequence update)	DT	01-DEC-2001 (TREMBLrel. 19, Last sequence update)
DT	01-DEC-2001 (TREMBLrel. 19, Last annotation update)	DT	01-DEC-2001 (TREMBLrel. 19, Last annotation update)

DE VEGF-D.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=SPRAGUE-DAWLEY;
RA Kirklin V., Mazitschek R., Krishnan J., Steffen A., Waltenberger J.,
RA Pepper M.S., Giannis A., Sleeman J.P.;
RT "Characterization of indolinones which specifically inhibit VEGF-C and
VEGF-D-induced activation of VEGFR-3 but not VEGFR-2.";
RT Eur. J. Biochem. AY032728; AAK56008 1.;
DR EMBL; AY032728;
SQ SEQUENCE 326 AA; 37106 MW; D7GAEBACG9FABB7D CRC64;

Query Match 19.7%; Score 117.5; DB 11; Length 326;
Best Local Similarity 33.0%; Pred. No. 2e-06;
Matches 35; Conservative 15; Mismatches 41; Indels 15; Gaps 6;
Qy 1 LLTEEVRLSCTPREFSREEL-KRTTNTFWFGCLLVTKRGCGNCACCLHNNNECOCY- 58
Db 106 VIDEEWQRQTCSPRETCTVASELGKTTNFFRKPCVNFRGG--CC--NEESVMCMN 160
Qy 59 --PSKVTKYHEVLQLRPTGYRLHKSLTDVALEHHEECDVYCRG 102
Db 161 TSTISKVQLEFISV--PLTSV---PELVPVKITANHFCCKCLPTG 200

RESULT 14
Q90x23 PRELIMINARY; PRT; 146 AA.
ID Q90x23 PRELIMINARY; PRT; 146 AA.
AC Q90x23;
DT 01-DEC-2001 ("TREMBLEL", 19, Created)
DT 01-DEC-2001 ("TREMBLEL", 19, Last sequence update)
DT 01-DEC-2001 ("TREMBLEL", 19, Last annotation update)
DE VASCULAR ENDOTHELIAL GROWTH FACTOR PRECURSOR.
OS Bothrops jararaca (Jararaca).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Lepidosaurs; Squamata; Scleroglossa; Serpentes; Colubroidea;
OC Viperidae; Crotalinae; Bothrops.
OX NCBI_TaxID=8724;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE-VENOM GLAND;
RX MEDLINE=2152345; PubMed=11517227;
RA Jungueira de Azevedo I.I.M., Farsky S.H.P., Oliveira M.L.S., Ho P.L.;
RT "Molecular Cloning and Expression of a Functional Snake Venom Vascular
Endothelium Growth Factor (VEGF) from the Bothrops insularis Pit
Viper. A New Member of the VEGF Family of Proteins.";
RL J. Biol. Chem. 276:39836-39842 (2001).
DR EMBL; AY033152; AAK52103.1.;
KW Signal.
FT SIGNAL 1 24 POTENTIAL.
FT CHAIN 25 146 VASCULAR ENDOTHELIAL GROWTH FACTOR.
SQ SEQUENCE 146 AA; 16377 MW; 451EEF514EA9408E CRC64;

Query Match 19.2%; Score 114.5; DB 13; Length 146;
Best Local Similarity 31.1%; Pred. No. 2e-06;
Matches 33; Conservative 14; Mismatches 42; Indels 17; Gaps 6;
Qy 5 EVRLYS-CTPRNFSVSTREELK RTDIFWPGCLLVTKRGCGNCACCLHNNNECOCYPSKV 62
Db 31 EVYRHSSVCPRETLVSLTEYGEISHIRPSCVTAALRGG--CCUDSELECTAGKRS 87
Qy 63 TKKYHEVLQLRPTGYRLHKSLTD--VALEHHEECDVCRGSTG 105
Db 88 VGR-EIMRLSP-----HKGTSKEVMMQFERTDCERPRSA 124

